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02-23-2000



101272614

To the Honorable Commissioner of Patents and Trademarks

1. Submission Type

- New
- Resubmission (Non-Recordation)
- Document ID # _____
- Correction of PTO Error
- Reel # _____ Frame # _____
- Corrective Document
- Reel # _____ Frame # _____

3. Name of Conveying Party:

Name: Brown & Sharpe Manufacturing Company

Formerly: _____

MONTH DAY YEAR

Execution Date: 11-24-99

- Individual(s) Association
- General Partnership Limited Partnership
- Corporation Other _____
- Citizenship/State of Incorporation/Organization: Delaware

Additional name(s) of conveying parties attached? Yes No

4. Conveyance Type:

- Assignment Merger License
 - Security Agreement Change of Name Nunc Pro Tunc Assignment
 - Other _____
- Effective Date: _____ (if nunc pro tunc assignment)

5. Application number(s) or registration number(s):

A. Trademark Application No.(s) 75/449,707

Additional numbers attached? Yes No

6. Name and address of party to whom correspondence concerning document should be mailed (and Domestic Representative Address, if applicable):

Name: Joseph K. Falzon
MILBANK, TWEED, HADLEY & McCLOY LLP

Address: One Chase Manhattan Plaza
City: New York State: NY Zip: 10005
Area Code and Telephone No: (212) 530-5278

ments or copy thereof.

of receiving party:

Name: The Chase Manhattan Bank, as Collateral Agent

DBA/AKA/TA: _____

Address: 4 Metrotech Center

City: Brooklyn State: NY Zip: 11245

- Individual Corporation
- Association Limited Partnership
- General Partnership Other _____

Citizenship/State of Incorporation:

New York

Additional name(s) of receiving parties attached: Yes No

If assignee is not domiciled in the United States, a domestic representative designation is attached:

Yes No

(Designations must be a separate document from Assignment)

B. Trademark registration No.(s) 408,940

7. Total number of applications and registration involved:

23

8. Total fee (37 CFR 3.41): \$615.00

Enclosed

Authorized to be charged to deposit account

9. Deposit account number:

13-3250

Authorized to charge additional fees Yes No

FOR OFFICE USE ONLY

10. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Joseph K. Falzon

Name of Person Signing

Signature

13-January-2000
Date

Total number of pages: 3
in cover sheet

Mail Documents to Commissioner of Patents and Trademarks, Box Assignments, Washington DC 20231

02/22/2000 DNGUYEN 00000236 75449707

01 FC:481
02 FC:482

(40.00 OP
575.00 OP)

TRADEMARK
REEL: 002025 FRAME: 0067

RECORDATION FORM COVER SHEET
CONTINUATION
TRADEMARKS ONLY

U.S. Department of Commerce

Patents and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

11. Conveying Party Mark if additional names of conveying parties attached.

Enter Additional Conveying Party Execution Date
Month Day Year

Name

Formerly

Individual General Partnership Limited Partnership Corporation Association

Other

Citizenship State of Incorporation/Organization

12. Receiving Party Mark if additional names of receiving parties attached

Enter Additional Receiving Party

Name

DBA/AKA/TA

Composed

Address (line 1)

Address (line 2)

Address (line 3)

Individual General Partnership Limited Partnership if document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative should be attached (Designation must be a separate document from the Assignment).

Corporation Association

Other

Citizenship/State of Incorporation/Organization

13. Trademark Application Number(s) or Registration Number(s) Mark if additional numbers attached

Enter either the Trademark Application Number or the Registration Number (DO NOT ENTER BOTH numbers for the same property).

Trademark Application Number(s)			Registration Number(s)		
75/522,897			666,866	1,115,573	1,527,928
75/570,596			676,477	1,228,285	1,658,029
75/571,648			676,478	1,331,723	1,660,670
			825,728	1,475,761	1,719,019
			1,105,564	1,515,252	1,973,883

RECORDATION FORM COVER SHEET
CONTINUATION
TRADEMARKS ONLY

U.S. Department of Commerce

Patents and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

11. Conveying Party

Mark if additional names of conveying parties attached.

Enter Additional Conveying Party

Execution Date
Month Day Year

Name

Formerly

Individual General Partnership Limited Partnership Corporation Association

Other

Citizenship State of Incorporation/Organization

14. Receiving Party

Enter Additional Receiving Party

Mark if additional names of receiving parties attached

Name

DBA/AKA/TA

Composed

Address (line 1)

Address (line 2)

Address (line 3)

Individual General Partnership Limited Partnership if document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative should be attached (Designation must be a separate document from the Assignment).

Corporation Association

Other

Citizenship/State of Incorporation/Organization

15. Trademark Application Number(s) or Registration Number(s)

Mark if additional numbers attached

Enter either the Trademark Application Number or the Registratoin Number (DO NOT ENTER BOTH numbers for the same property).

Trademark Application Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Registration Number(s)

2,030,024	<input type="text"/>	<input type="text"/>
2,053,385	<input type="text"/>	<input type="text"/>
2,226,510	<input type="text"/>	<input type="text"/>
1,125,940	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

PLEDGE AND SECURITY AGREEMENT

PLEDGE AND SECURITY AGREEMENT dated as of November 24, 1999 among BROWN & SHARPE MANUFACTURING COMPANY, a Delaware corporation ("BNS"); each of the MATERIAL DOMESTIC SUBSIDIARIES that may become a party hereto from time to time pursuant to Section 6.11 hereof (the "Guarantors" and, together with BNS, the "Obligors"); and THE CHASE MANHATTAN BANK, as collateral agent for the Secured Parties as hereinafter defined (in such capacity, together with its successors in such capacity, the "Collateral Agent").

WHEREAS, BNS, as Borrower, certain lenders (together with their respective successors and assigns, the "Bank Lenders") and The Chase Manhattan Bank, as Issuing Bank, Administrative Agent and Collateral Agent have entered into a Credit Agreement dated as of November 10, 1997 (as from time to time amended, the "Credit Agreement"), providing for extensions of credit to BNS in an aggregate principal amount at any one time outstanding not exceeding \$30,000,000, which extensions of credit may be evidenced by promissory notes as provided therein (as from time to time amended, the "Bank Notes");

WHEREAS, BNS and certain institutional lenders (together with their respective successors and assigns, the "Holders" and, together with the Bank Lenders, the "Secured Creditors") have purchased 7.29% Senior Notes Due 2007 (as from time to time amended, the "Senior Notes") pursuant to a Note Agreement dated November 10, 1997 (as from time to time amended, the "Senior Note Agreement" and, together with the Senior Notes, the "Senior Note Documents"; such Senior Note Documents together with the Credit Agreement and the Bank Notes being referred to herein as the "Senior Loan Documents") of BNS in an aggregate principal amount of \$50,000,000;

WHEREAS, to induce the Bank Lenders to enter into the Amendment No. 1 and Waiver Agreement dated as of November 4, 1999 ("Credit Agreement Amendment") in respect of the Credit Agreement and the Holders to enter into the Amendment No. 1 to Note Agreement for 7.29% Senior Notes due 2007 dated October 28, 1999 ("Note Agreement Amendment" and, together with the Credit Agreement Amendment, the "Amendments") in respect of the Senior Note Agreement, to grant waivers as provided thereunder and to continue extensions of credit to BNS as provided in the Senior Loan Documents, respectively, each Obligor has agreed to pledge, grant, transfer, and assign to the Collateral Agent a security interest in the Collateral (as hereinafter defined) to secure the Secured Obligations (as hereinafter defined), all as provided herein;

WHEREAS, the Secured Creditors have, pursuant to the Amendments, designated that the Collateral Agent (on their behalf) receive the grant and pledge of collateral security under this Agreement;

Pledge and Security Agreement

NOW, THEREFORE, in consideration of the mutual promises, covenants, representations, and warranties set forth herein and for other good and valuable consideration, the parties hereto agree as follows:

Section 1. Definitions. Except as otherwise expressly provided herein, terms defined in the Credit Agreement are used herein as defined therein. In addition, as used herein:

"Accounts" has the meaning set forth in Article 9 of the UCC.

"BNS" has the meaning set forth in the introduction hereto.

"Certificated Security" has the meaning set forth in Section 8-102 of the UCC.

"Chattel Paper" has the meaning set forth in Article 9 of the UCC.

"Collateral" has the meaning set forth in Section 3 hereof.

"Collateral Account" has the meaning set forth in Section 4.01.

"Collateral Agent" has the meaning set forth in the introduction hereto.

"Copyright Collateral" means all Copyrights, whether now owned or hereafter acquired by any Obligor, including each Copyright identified in Annex 2.

"Copyrights" means all copyrights, copyright registrations and applications for copyright registrations, including, without limitation, all renewals and extensions thereof, the right to recover for all past, present and future infringements thereof, and all other rights of any kind whatsoever accruing thereunder or pertaining thereto.

"Deed of Pledge" means the Deed Establishing Pledge Over Shares dated January 12, 1998 between the Borrower and The Chase Manhattan Bank, as pledge agent thereunder, as from time to time amended.

"Default" means any "Default" as defined in any of the Senior Loan Documents.

"Document" has the meaning set forth in Article 9 of the UCC.

"Equipment" has the meaning set forth in Article 9 of the UCC.

"Event of Default" means any "Event of Default" as defined in any of the Senior Loan Documents.

"Financial Asset" has the meaning set forth in Section 8-102 of the UCC.

"General Intangibles" has the meaning set forth in Article 9 of the UCC.

"Goods" has the meaning set forth in Article 9 of the UCC.

Pledge and Security Agreement

"Guarantee Agreement" means any "Guarantee Agreement" as defined in the Credit Agreement or as defined the Senior Note Agreement.

"Guarantors" has the meaning set forth in the introduction hereto.

"Initial Pledge Agreement" means the Pledge Agreement dated as of November 10, 1997 among the Borrower and The Chase Manhattan Bank as collateral agent thereunder, as from time to time amended.

"Initial Pledged Stock" means any of the "Initial Shares" and "Future Securities" as each is defined in the Deed of Pledge and "Pledged Stock" as defined in the Initial Pledge Agreement that BNS has pledged as collateral security therein.

"Instrument" has the meaning set forth in Article 9 of the UCC.

"Intellectual Property" means, collectively, all Copyright Collateral, all Patent Collateral and all Trademark Collateral, together with (a) all inventions, processes, production methods, proprietary information, know-how and trade secrets; (b) all licenses or user or other agreements granted to any Obligor with respect to any of the foregoing, in each case whether now or hereafter owned or used including, without limitation, the licenses or other agreements with respect to the Copyright Collateral, the Patent Collateral or the Trademark Collateral, listed in Annex 2; (c) all information, customer lists, identification of suppliers, data, plans, blueprints, specifications, designs, drawings, recorded knowledge, surveys, engineering reports, test reports, manuals, materials standards, processing standards, performance standards, catalogs, computer and automatic machinery software and programs; (d) all field repair data, sales data and other information relating to sales or service of products now or hereafter manufactured; (e) all accounting information and all media in which or on which any information or knowledge or data or records may be recorded or stored and all computer programs used for the compilation or printout of such information, knowledge, records or data; (f) all licenses, consents, permits, variances, certifications and approvals of governmental agencies now or hereafter held by any Obligor; and (g) all causes of action, claims and warranties now or hereafter owned or acquired by any Obligor in respect of any of the items listed above; provided, that the term "Intellectual Property" shall not be deemed to include any of the foregoing if and to the extent the documents creating or governing the same or granting any license or other Intellectual Property prohibits, or would be rendered void by, the grant of a security interest therein.

"Inventory" has the meaning set forth in Article 9 of the UCC.

"Investment Property" has the meaning set forth in Section 9-115 of the UCC.

"Issuer" means each of the Persons named under the caption "Issuer" in Annex 1 hereto.

"Market Instruments" means all Instruments, Chattel Paper, Documents and letters of credit.

Pledge and Security Agreement

"Obligors" has the meaning set forth in the introduction hereto.

"Patent Collateral" means all Patents, whether now owned or hereafter acquired by any Obligor, including each Patent identified in Annex 2.

"Patents" means all patents and patent applications, including, without limitation, the inventions and improvements described and claimed therein together with the reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof, all income, royalties, damages and payments now or hereafter due and/or payable under and with respect thereto, including, without limitation, damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world.

"Pledged Securities" has the meaning set forth in Section 3(a) hereof.

"Proceeds" has the meaning set forth in Article 9 of the UCC.

"Secured Creditors" has the meaning set forth in the second recital paragraph hereto.

"Secured Obligations" means, collectively, (a) the principal of and interest on the Loans and the Notes and all other amounts whatsoever from time to time now or hereafter owing to the Secured Creditors, the Issuing Bank or the Administrative Agent by BNS under the Loan Documents; (b) the principal of and interest on the Senior Notes and all other amounts whatsoever from time to time now or hereafter owing to the Holders under the Senior Note Documents; (c) all amounts from time to time hereafter owing by any Guarantor under its Guarantee Agreements; and (d) all obligations of the Obligors hereunder.

"Secured Parties" means, collectively, the Secured Creditors, the Issuing Bank, the Administrative Agent, the Holders and the Collateral Agent.

"Securities Account" has the meaning set forth in Section 8-501 of the UCC.

"Securities Intermediary" has the meaning set forth in Section 8-102 of the UCC.

"Securities Pledgor" means each of the Persons named under the caption "Securities Pledgor" in Annex 1 hereto.

"Security Certificate" has the meaning set forth in Section 8-102 of the UCC.

"Security Entitlement" has the meaning set forth in Section 8-102 of the UCC.

"Senior Loan Documents" has the meaning set forth in the second recital paragraph hereto.

"Trademark Collateral" means all Trademarks, whether now owned or hereafter acquired by any Obligor, including each Trademark identified in Annex 2.

Pledge and Security Agreement

"Trademarks" means all trade names, trademarks and service marks, logos, trademark and service mark registrations, and applications for trademark and service mark registrations, including, without limitation, all renewals of trademark and service mark registrations, all rights corresponding thereto throughout the world, the right to recover for all past, present and future infringements thereof, all other rights of any kind whatsoever accruing thereunder or pertaining thereto, together, in each case, with the product lines and goodwill of the business connected with the use of, and symbolized by, each such trade name, trademark and service mark.

"UCC" means the Uniform Commercial Code as in effect from time to time in the State of New York.

Section 2. Representations and Warranties. Each Obligor represents and warrants to the Secured Parties that:

(a) Organization; Powers. Such Obligor is duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation and has full legal power and authority, and is duly authorized by all necessary corporate action, to make and perform this Agreement and to grant the collateral provided hereunder; and such making and performance and said grant do not and will not violate any provision of its charter or by-laws or of any applicable law or regulation or any judgment, order, writ, injunction, decree or consent of any court or other judicial authority, or any agreement or instrument to which it is a party; and this Agreement constitutes its legal, valid and binding obligation, enforceable in accordance with its terms.

(b) Authorization. No authorizations, approvals or consents of, and no filings (other than any financing statements that may be required under the UCC) or registrations with, any governmental or regulatory authority or agency, or any securities exchange are necessary for the execution, delivery or performance by such Obligor of this Agreement or for the validity or enforceability hereof.

(c) Ownership and Liens. Such Obligor is the sole beneficial owner of the Collateral in which it purports to grant a security interest pursuant to Section 3 hereof and no Lien exists or will exist upon such Collateral at any time (and no right or option to acquire the same exists in favor of any other Person), except for Liens expressly permitted under the Senior Loan Documents (including the Liens of the Deed of Pledge and the Initial Pledge Agreement) and except for the pledge and security interest in favor of the Collateral Agent for the benefit of the Secured Parties created or provided for herein, which pledge and security interest constitute a first priority perfected pledge and security interest in and to all of such Collateral.

(d) Status of Pledged Securities. The Pledged Securities represented by the certificates identified under the name of such Securities Pledgor in Annex 1 hereto is, and all other Pledged Securities in which such Securities Pledgor shall hereafter grant a security interest pursuant to Section 3 hereof will be, duly authorized, validly existing, fully paid and non-assessable and none of such Pledged Securities is or will be subject to any contractual restriction, or any restriction under the charter or by-laws of the

Pledge and Security Agreement

respective Issuer of such Pledged Securities, upon the transfer of such Pledged Securities (except for any such restriction contained herein or in any Senior Loan Document). Annex 1 correctly identifies, as at the date hereof, the Issuer of the respective Pledged Securities, the respective class and par value of the shares, or the respective series and maturity of the debt obligations, comprising such Pledged Securities and the respective number of shares, or stated principal amount, and the registered owners of the stock or debt obligation represented by each such certificate.

(e) Intellectual Property. Annex 2 sets forth under the name of such Obligor a complete and correct list of all Copyrights, Patents and Trademarks owned or licensed by such Obligor on the date hereof; and except pursuant to licenses and other user agreements entered into by such Obligor in the ordinary course of business, such Obligor owns and possesses the right to use, and has done nothing to authorize or enable any other Person (other than an Affiliate of such Obligor) to use, any Copyright, Patent or Trademark listed in Annex 2, and all registrations listed in Annex 2, are valid and in full force and effect. Annex 2 sets forth a complete and correct list of all licenses and other user agreements included in the Intellectual Property on the date hereof. To such Obligor's knowledge, (i) except as set forth in Annex 2, there is no violation by others of any right of such Obligor with respect to any Copyright, Patent or Trademark listed in Annex 2 under the name of such Obligor and (ii) the use and licensing of, and exercise of rights with respect to, the Intellectual Property of such Obligor is not infringing in any respect upon any Copyright, Patent or Trademark of any other Person; and no proceedings have been instituted or are pending against such Obligor or, to such Obligor's knowledge, threatened, and no claim against such Obligor has been received by such Obligor, alleging any such infringement, except as may be set forth in Annex 2.

(f) Fair Labor Standards Act. Any Goods now or hereafter produced by such Obligor included in the Collateral have been and will be produced in compliance with the requirements of the Fair Labor Standards Act, as amended.

(g) Location. The chief executive office and taxpayer identification number of each Obligor is as set forth in Annex 3, and said Annex 3 correctly sets forth the locations of the Inventory and Equipment of said Obligor (other than goods subject to consignment).

Section 3. Collateral; Grant. As collateral security for the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations, each Obligor hereby pledges and grants to the Collateral Agent, for the benefit of the Secured Parties as hereinafter provided, a security interest in all of such Obligor's right, title and interest in the following property, whether now owned by such Obligor or hereafter acquired and whether now existing or hereafter coming into existence (all being referred to herein as the "Collateral"):

(a) each Certificated Security in which such Obligor has any direct or indirect beneficial ownership interest (other than any Initial Pledged Stock) and the Security Certificate therefor is held by such Obligor or by any custodian or agent (other than a Securities Intermediary in a Securities Account), in each case together with the Security Certificate evidencing the same (collectively, the "Pledged Securities");

Pledge and Security Agreement

(b) all shares, securities, moneys or property representing interest or a dividend on any of the Pledged Securities, or representing a distribution or return of capital upon or in respect of the Pledged Securities, or representing a prepayment or payment of principal, or resulting from a split-up, revision, reclassification or other like change of the Pledged Securities or otherwise received in exchange therefor, and any subscription warrants, rights or options issued to the holders of, or otherwise in respect of, the Pledged Securities;

(c) without affecting the obligations of such Obligor under any provision prohibiting such action hereunder or under any Senior Loan Document, in the event of any consolidation or merger in which an Issuer is not the surviving corporation, all shares of each class of the capital stock of the successor corporation (unless such successor corporation is such Obligor itself) formed by or resulting from such consolidation or merger;

(d) all Accounts;

(e) all General Intangibles;

(f) all Market Instruments;

(g) all Goods, including, without limitation, all Equipment and Inventory;

(h) all Intellectual Property;

(i) all Securities Accounts and all Financial Assets and all Security Entitlements from time to time carried therein, and all other Investment Property;

(j) without limiting clause (i) above, the balance from time to time in the Collateral Account;

(k) all policies of insurance, excluding officers and directors indemnity insurance; and

(l) all Proceeds of and to any of the property of such Obligor described in the preceding clauses of this Section 3 (including, without limitation, all causes of action, claims and warranties now or hereafter held by any Obligor in respect of any of the items listed above) and, to the extent related to any property described in said clauses or such proceeds, all books, correspondence, credit files, records, invoices and other papers.

Section 4. Cash Proceeds of Collateral.

4.01 Collateral Account. The Collateral Agent will cause to be established at a banking institution to be selected by the Collateral Agent a cash collateral account (the "Collateral Account"), which shall be a "securities account" (as defined in Section 8-501 of the UCC), in the name and under the sole dominion and control of the Collateral Agent, in respect of which the Collateral Agent is the "entitlement holder" (as defined in Section 8-102(a)(7) of the

Pledge and Security Agreement

UCC)), into which there shall be deposited from time to time the cash proceeds of any of the Collateral (including proceeds of insurance thereon) required to be delivered to the Collateral Agent pursuant hereto and into which any Obligors may from time to time deposit any additional amounts that any of them wishes to pledge to the Collateral Agent for the benefit of the Secured Parties as additional collateral security hereunder. The balance from time to time in the Collateral Account shall constitute part of the Collateral hereunder and shall not constitute payment of the Secured Obligations until applied as hereinafter provided. Except as expressly provided in the next sentence, the Collateral Agent shall remit the collected balance standing to the credit of the Collateral Account to or upon the order of BNS as it shall from time to time instruct. At any time following the occurrence and during the continuance of an Event of Default, the Collateral Agent may in its discretion apply or cause to be applied (subject to collection) the balance from time to time standing to the credit of the Collateral Account to the payment of the Secured Obligations in the manner specified in Section 5.09. The balance from time to time in the Collateral Account shall be subject to withdrawal only as provided herein.

4.02 Proceeds of Accounts. Each Obligor shall be required to instruct all account debtors and other Persons obligated in respect of all Accounts, General Intangibles and Market Instruments pledged to the Collateral Agent for the benefit of the Secured Parties hereunder to make all payments in respect thereof either (a) directly to the Collateral Agent (by instructing that such payments be remitted to a post office box which shall be in the name and under the control of the Collateral Agent) or (b) to one or more other banks in the United States of America (by instructing that such payments be remitted to a post office box which shall be in the name and under the control of the Collateral Agent) under arrangements, in form and substance satisfactory to the Collateral Agent, pursuant to which such Obligor shall have irrevocably instructed such other bank (and such other bank shall have agreed) to remit all proceeds of such payments directly to the Collateral Agent for deposit into the Collateral Account. All payments made to the Collateral Agent, as provided in the preceding sentence, shall be immediately deposited in the Collateral Account. In addition to the foregoing, each Obligor agrees that, at any time after the occurrence and during the continuance of an Event of Default, if the proceeds of any Collateral hereunder (including the payments made in respect of Accounts) shall be received by it, such Obligor shall, upon the request of the Collateral Agent, as promptly as possible deposit such proceeds into the Collateral Account. Until so deposited, all such proceeds shall be held in trust by such Obligor for and as the property of the Collateral Agent and shall not be commingled with any other funds or property of such Obligor.

4.03 Investment of Balance in Collateral Account. The cash balance standing to the credit of the Collateral Account shall be invested from time to time in such Permitted Investments as BNS shall in writing instruct the Collateral Agent, which Permitted Investments shall be held in the name and be under the control of the Collateral Agent, provided that at any time after the occurrence and during the continuance of an Event of Default, the Collateral Agent may in its discretion at any time and from time to time elect to liquidate any such Permitted Investments and to apply or cause to be applied the proceeds thereof to the payment of the Secured Obligations in the manner specified in Section 5.09.

Section 5. Further Assurances; Remedies. In furtherance of the grant of the pledge and security interest pursuant to Section 3 hereof, the Obligors hereby jointly and severally agree with each Secured Party as follows:

Pledge and Security Agreement

5.01 Delivery and Other Perfection. Each Obligor shall:

(a) if any of the Certificated Securities, shares, securities, moneys or property required to be pledged by such Obligor under clauses (a), (b) and (c) of Section 3 hereof are received by such Obligor, forthwith either (x) transfer and deliver to the Collateral Agent such shares or securities so received by such Obligor (together with the certificates for any such shares and securities duly endorsed in blank or accompanied by undated stock powers duly executed in blank), all of which thereafter shall be held by the Collateral Agent, pursuant to the terms of this Agreement, as part of the Collateral or (y) take such other action as the Collateral Agent shall deem necessary or appropriate to duly record the Lien created hereunder in such shares, securities, moneys or property in said clauses (a), (b) and (c);

(b) deliver and pledge to the Collateral Agent any and all Market Instruments, endorsed and/or accompanied by such instruments of assignment and transfer in such form and substance necessary to perfect the Lien granted hereunder or as the Collateral Agent may otherwise request, provided, that so long as no Event of Default shall have occurred and be continuing, such Obligor may retain for collection in the ordinary course any Market Instruments received by such Obligor in the ordinary course of business and the Collateral Agent shall, promptly upon written request of such Obligor through the Company, make appropriate arrangements for making any Market Instrument pledged by such Obligor available to such Obligor for purposes of presentation, collection or renewal (any such arrangement to be effected, to the extent deemed appropriate by the Collateral Agent, against trust receipt or like document);

(c) give, execute, deliver, file and/or record any financing statement, notice, instrument, document, agreement or other papers that may be necessary or desirable (in the judgment of the Collateral Agent) to create, preserve, perfect or validate the security interest granted pursuant hereto or to enable the Collateral Agent to exercise and enforce its rights hereunder with respect to such pledge and security interest, including, without limitation, causing any or all of the Collateral to be transferred of record into the name of the Collateral Agent or its nominee (and the Collateral Agent agrees that if any Collateral is transferred into its name or the name of its nominee, the Collateral Agent will thereafter promptly give to such Obligor copies of any notices and communications received by it with respect to the Collateral pledged by such Obligor hereunder);

(d) cause each insurer in respect of the policies of insurance that constitute Collateral hereunder to name the Collateral Agent as an additional loss payee and/or beneficiary as its interest may appear under each such policy;

(e) upon request of the Collateral Agent, promptly notify (and such Obligor hereby authorizes the Collateral Agent so to notify) each account debtor in respect of any Accounts, General Intangibles or Market Instruments constituting Collateral hereunder that such Collateral has been assigned to the Collateral Agent hereunder, and that any payments due or to become due in respect of such Collateral are to be made directly to the Collateral Agent;

Pledge and Security Agreement

(f) keep full and accurate books and records relating to the Collateral, and stamp or otherwise mark such books and records in such manner as the Collateral Agent may reasonably require in order to reflect the security interests granted by this Agreement; and

(g) permit representatives of the Collateral Agent, upon reasonable notice, at any time during normal business hours to inspect and make abstracts from its books and records pertaining to the Collateral, and permit representatives of the Collateral Agent to be present at such Obligor's place of business to receive copies of all communications and remittances relating to the Collateral, and forward copies of any notices or communications received by such Obligor with respect to the Collateral, all in such manner as the Collateral Agent may require.

5.02 Other Financing Statements and Liens. Except as otherwise expressly permitted by the Senior Loan Documents, without the prior written consent of the Collateral Agent (granted with the authorization of the Banks as specified in the Credit Agreement), no Obligor shall file or suffer to be on file, or authorize or permit to be filed or to be on file, in any jurisdiction, any financing statement or like instrument with respect to the Collateral in which the Collateral Agent is not named as the sole secured party for the benefit of the Secured Parties.

5.03 Preservation of Rights. The Collateral Agent shall not be required to take steps necessary to preserve any rights against prior parties to any of the Collateral.

5.04 Special Provisions Relating to Certain Collateral.

(a) **Stock of Material Domestic Subsidiaries.** BNS will cause the Collateral to constitute at all times 100% of the total number of shares of each class of capital stock of each Issuer that is a Material Domestic Subsidiary (other than any Initial Pledged Stock).

(b) **Stock Collateral.** (1) So long as no Event of Default shall have occurred and be continuing, the respective Obligors shall have the right to exercise all voting, consensual and other powers of ownership pertaining to any part of the Collateral consisting of shares of stock for all purposes not inconsistent with the terms of this Agreement, any Senior Loan Document or any other instrument or agreement referred to herein or therein, provided, that the Obligors jointly and severally agree that it will not vote the Collateral in any manner that is inconsistent with the terms of this Agreement, any Senior Loan Document or any such other instrument or agreement; and the Collateral Agent shall execute and deliver to each applicable Obligor or cause to be executed and delivered to such Obligor all such proxies, powers of attorney, dividend and other orders, and all such instruments, without recourse, as such Obligor may reasonably request for the purpose of enabling such Obligor to exercise the rights and powers that it is entitled to exercise pursuant to this Section 5.04(b)(1).

(2) Unless and until an Event of Default has occurred and is continuing, the Obligors shall be entitled to receive and retain any dividends on any part of the Collateral consisting of shares of stock paid in cash out of earned surplus.

(3) If any Event of Default shall have occurred, then so long as such Event of Default shall continue, and whether or not the Collateral Agent or any Secured Party exercises any available right to declare any Secured Obligation due and payable or seeks or pursues any

Pledge and Security Agreement

other relief or remedy available to it under applicable law or under this Agreement, or the Senior Loan Documents or any other agreement relating to such Secured Obligation, all dividends and other distributions on any part of the Collateral consisting of shares of stock shall be paid directly to the Collateral Agent and retained by it in the Collateral Account as part of the Collateral, subject to the terms of this Agreement, and, if the Collateral Agent shall so request in writing, each Obligor agrees to execute and deliver to the Collateral Agent appropriate additional dividend, distribution and other orders and documents to that end, provided, that if such Event of Default is cured, any such dividend or distribution theretofore paid to the Collateral Agent shall, upon request of any Obligor (except to the extent theretofore applied to the Secured Obligations), be returned by the Collateral Agent to such Obligor.

(c) (1) For the purpose of enabling the Collateral Agent to exercise rights and remedies under Section 5.05 at such time as the Collateral Agent shall be lawfully entitled to exercise such rights and remedies, and for no other purpose, each Obligor hereby grants to the Collateral Agent, to the extent permitted by the documents creating, governing or granting any relevant license or other Intellectual Property, an irrevocable, non-exclusive license (exercisable without payment of royalty or other compensation to such Obligor) to use, assign, license or sublicense any of the Intellectual Property now owned or hereafter acquired by such Obligor, wherever the same may be located, including in such license reasonable access to all media in which any of the licensed items may be recorded or stored and to all computer programs used for the compilation or printout thereof.

(2) Notwithstanding anything contained herein to the contrary, but subject to any provision of any of the Senior Loan Documents that limit the rights of the Obligors to dispose of their property, so long as no Event of Default shall have occurred and be continuing, the Obligors will be permitted to exploit, use, enjoy, protect, license, sublicense, assign, sell, dispose of or take other actions with respect to the Intellectual Property in the ordinary course of the business of the Obligors. In furtherance of the foregoing, unless an Event of Default shall have occurred and be continuing, the Collateral Agent shall from time to time, promptly after the request of the respective Obligor, execute and deliver any instruments, certificates or other documents, in the form so requested, that such Obligor through the Company shall have certified are appropriate (in its judgment) to allow it to take any action permitted above (including relinquishment of the license provided pursuant to clause (1) immediately above as to any specific Intellectual Property). Further, upon the payment in full of all of the Secured Obligations and cancellation or termination of the commitments and letter of credit liabilities under the Senior Loan Documents or earlier expiration of this Agreement or release of the Collateral, the Collateral Agent shall grant back to the Obligors the license granted pursuant to clause (1) immediately above. The exercise of rights and remedies under Section 5.05 by the Collateral Agent shall not terminate the rights of the holders of any licenses or sublicenses theretofore granted by the Obligors in accordance with the first sentence of this clause (2).

5.05 Events of Default, Etc. During the period during which an Event of Default shall have occurred and be continuing:

(a) each Obligor shall, at the request of the Collateral Agent, assemble the Collateral owned by it at such place or places, reasonably convenient to both the Collateral Agent and such Obligor, designated in its request;

Pledge and Security Agreement

(b) the Collateral Agent may make any reasonable compromise or settlement deemed desirable with respect to any of the Collateral and may extend the time of payment, arrange for payment in installments, or otherwise modify the terms of, any of the Collateral;

(c) the Collateral Agent shall have all of the rights and remedies with respect to the Collateral of a secured party under the UCC (whether or not the UCC is in effect in the jurisdiction where the rights and remedies are asserted) and such additional rights and remedies to which a secured party is entitled under the laws in effect in any jurisdiction where any rights and remedies hereunder may be asserted, including, without limitation, the right, to the maximum extent permitted by law, to exercise all voting, consensual and other powers of ownership pertaining to the Collateral as if the Collateral Agent were the sole and absolute owner thereof (and each Obligor agrees to take all such action as may be appropriate to give effect to such right);

(d) the Collateral Agent in its discretion may, in its name or in the name of one or more of the Obligors or otherwise, demand, sue for, collect or receive any money or property at any time payable or receivable on account of or in exchange for any of the Collateral, but shall be under no obligation to do so; and

(e) the Collateral Agent may, upon ten Business Days' prior written notice to the Obligors of the time and place, with respect to the Collateral or any part thereof that shall then be or shall thereafter come into the possession, custody or control of the Collateral Agent, the Secured Parties or any of their respective agents, sell, lease, assign or otherwise dispose of all or any part of such Collateral, at such place or places as the Collateral Agent deems best, and for cash or for credit or for future delivery (without thereby assuming any credit risk), at public or private sale, without demand of performance or notice of intention to effect any such disposition or of the time or place thereof (except such notice as is required above or by applicable statute and cannot be waived), and the Collateral Agent or any Secured Party or anyone else may be the purchaser, lessee, assignee or recipient of any or all of the Collateral so disposed of at any public sale (or, to the extent permitted by law, at any private sale) and thereafter hold the same absolutely, free from any claim or right of whatsoever kind, including any right or equity of redemption (statutory or otherwise), of the Obligors, any such demand, notice and right or equity being hereby expressly waived and released. In the event of any sale, assignment, or other disposition of any of the Trademark Collateral, the goodwill connected with and symbolized by the Trademark Collateral subject to such disposition shall be included, and the Obligors shall supply to the Collateral Agent or its designee, for inclusion in such sale, assignment or other disposition, all Intellectual Property relating to such Trademark Collateral. The Collateral Agent may, without notice or publication, adjourn any public or private sale or cause the same to be adjourned from time to time by announcement at the time and place fixed for the sale, and such sale may be made at any time or place to which the sale may be so adjourned.

The proceeds of each collection, sale or other disposition under this Section 5.05, including by virtue of the exercise of the license granted to the Collateral Agent in Section 5.04(c), shall be applied in accordance with Section 5.09.

Pledge and Security Agreement

The Obligors recognize that, by reason of certain prohibitions contained in the Securities Act of 1933, as amended, and applicable state securities laws, the Collateral Agent may be compelled, with respect to any sale of all or any part of the Collateral, to limit purchasers to those who will agree, among other things, to acquire the Collateral for their own account, for investment and not with a view to the distribution or resale thereof. The Obligors acknowledge that any such private sales may be at prices and on terms less favorable to the Collateral Agent than those obtainable through a public sale without such restrictions, and, notwithstanding such circumstances, agree that any such private sale shall be deemed to have been made in a commercially reasonable manner and that the Collateral Agent shall have no obligation to engage in public sales and no obligation to delay the sale of any Collateral for the period of time necessary to permit the respective Issuer or issuer thereof to register it for public sale.

5.06 Deficiency. If the proceeds of sale, collection or other realization of or upon the Collateral pursuant to Section 5.05 are insufficient to cover the costs and expenses of such realization and the payment in full of the Secured Obligations, the Obligors shall remain liable for any deficiency to the extent the Obligors are obligated under this Agreement.

5.07 Removals, Etc. Without at least 30 days' prior written notice to the Collateral Agent, no Obligor shall (i) maintain any of its books and records with respect to the Collateral at any office, or maintain its chief executive office at any place, or permit any Inventory or Equipment to be located anywhere, other than at Precision Park, 200 Frenchtown Road, North Kingstown, Washington County, Rhode Island or at one of the locations identified in Annex 3 across from its name or in transit from one of such locations to another, (ii) change its name, the name under which it does business or taxpayer identification number, from the name or number shown on the signature pages hereto or its identity or corporate structure or (iii) change its jurisdiction of organization. Within 30 days after the delivery of any such notice to the Collateral Agent, BNS will, if so requested by the Collateral Agent or any other Secured Party, deliver to the Collateral Agent a legal opinion in form and substance reasonably satisfactory to the Collateral Agent to the effect that such additional steps, if any, as are required, as a result of such change, to continue the perfection of the relevant Collateral have been taken.

5.08 Private Sale. The Collateral Agent and the Secured Parties shall incur no liability as a result of the sale of the Collateral, or any part thereof, at any private sale pursuant to Section 5.05 hereof conducted in a commercially reasonable manner. Each Obligor hereby waives any claims against the Collateral Agent or any Secured Party arising by reason of the fact that the price at which the Collateral may have been sold at such a private sale was less than the price that might have been obtained at a public sale or was less than the aggregate amount of the Secured Obligations, even if the Collateral Agent accepts the first offer received and does not offer the Collateral to more than one offeree.

5.09 Application of Proceeds. Except as otherwise herein expressly provided and except as provided below in this Section 5.09, the proceeds of any collection, sale or other realization of all or any part of the Collateral pursuant hereto, and any other cash at the time held by the Collateral Agent under Section 4 or this Section 5, shall be applied by the Collateral Agent:

First, to the payment of the costs and expenses of such collection, sale or other realization, including reasonable out-of-pocket costs and expenses of the Collateral Agent

Pledge and Security Agreement

and the fees and expenses of its agents and counsel, and all expenses incurred and advances made by the Collateral Agent in connection therewith;

Next, to the payment in full of the Secured Obligations in accordance with the Intercreditor Agreement; and

Finally, to the payment to BNS, or its successors or assigns, or as a court of competent jurisdiction may direct, of any surplus then remaining.

As used in this Section 5, "proceeds" of Collateral shall mean cash, securities and other property realized in respect of, and distributions in kind of, Collateral, including any thereof received under any reorganization, liquidation or adjustment of debt of the Obligor or any issuer of or obligor on any of the Collateral.

5.10 Attorney-in-Fact. Without limiting any rights or powers granted by this Agreement to the Collateral Agent while no Event of Default has occurred and is continuing, upon the occurrence and during the continuance of any Event of Default the Collateral Agent is hereby appointed the attorney-in-fact of each Obligor for the purpose of carrying out the provisions of this Section 5 and taking any action and executing any instruments that the Collateral Agent may deem necessary or advisable to accomplish the purposes hereof, which appointment as attorney-in-fact is irrevocable and coupled with an interest. Without limiting the generality of the foregoing, so long as the Collateral Agent shall be entitled under this Section 5 to make collections in respect of the Collateral, the Collateral Agent shall have the right and power to receive, endorse and collect all checks made payable to the order of any Obligor representing any dividend, payment or other distribution in respect of the Collateral or any part thereof and to give full discharge for the same.

5.11 Perfection. Prior to or concurrently with the execution and delivery of this Agreement, each Obligor shall (i) file such financing statements and other documents in such offices as shall be required by applicable law to perfect the security interests granted by Section 3 of this Agreement, (ii) deliver to the Collateral Agent all certificates identified in Annex 1, accompanied by undated stock powers duly executed in blank and (iii) make filings of such instruments, in form and substance satisfactory to the Collateral Agent, with the United States Patent and Trademark Office to perfect the security interests granted by Section 3 in the Intellectual Property identified in Annex 2.

5.12 Termination. When all Secured Obligations shall have been paid in full and any commitment of any Secured Party to extend credit under the Credit Agreement and the Senior Note Documents has terminated, this Agreement shall terminate, and the Collateral Agent shall forthwith cause to be assigned, transferred and delivered, against receipt but without any recourse, warranty or representation whatsoever, any remaining Collateral and money received in respect thereof, to or on the order of the respective Obligor and to be released and canceled all licenses and rights referred to in Section 5.04(c). The Collateral Agent shall also promptly execute and deliver to the respective Obligor upon such termination such UCC termination statements and such other documentation as may be prepared by such Obligor or the Company and reasonably required to effect the termination and release of the Liens on the Collateral.

Pledge and Security Agreement

5.13 Further Assurances. Each Obligor agrees that, from time to time upon the written request of the Collateral Agent, such Obligor will execute and deliver such further documents and do such other acts and things as the Collateral Agent may reasonably request in order fully to effect the purposes of this Agreement.

Section 6. Miscellaneous.

6.01 No Waiver. No failure on the part of the Collateral Agent or any Secured Party to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise by the Collateral Agent or any Secured Party of any right, power or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right, power or remedy. The remedies herein are cumulative and are not exclusive of any remedies provided by law.

6.02 Notices. All notices, requests, consents and demands hereunder shall be in writing and telecopied or delivered to the intended recipient at its "Address for Notices" specified pursuant to the Credit Agreement and shall be deemed to have been given at the times specified therein.

6.03 Expenses. The Obligors jointly and severally agree to reimburse each of the Secured Parties, including the Collateral Agent, for all reasonable costs and expenses (including, without limitation, the reasonable fees and expenses of legal counsel) incurred by them in connection with (i) any Default and any enforcement or collection proceeding resulting therefrom, including, without limitation, all manner of participation in or other involvement with (w) performance by the Collateral Agent of any obligations of any Obligor in respect of the Collateral that such Obligor has failed or refused to perform, (x) bankruptcy, insolvency, receivership, foreclosure, winding up or liquidation proceedings, or any actual or attempted sale, or any exchange, enforcement, collection, compromise or settlement in respect of any of the Collateral, and for the care of the Collateral and defending or asserting rights and claims of the Collateral Agent in respect thereof, by litigation or otherwise (including expenses of insurance), (y) judicial or regulatory proceedings and (z) workout, restructuring or other negotiations or proceedings (whether or not the workout, restructuring or transaction contemplated thereby is consummated) and (ii) the enforcement of this Section 6.03, and all such costs and expenses shall be Secured Obligations entitled to the benefits of the collateral security provided pursuant to Section 3 hereof.

6.04 Amendments, Etc.

(a) The terms of this Agreement may be waived, altered or amended only by an instrument in writing duly executed by the Obligor and the Collateral Agent (subject to the terms of the Intercreditor Agreement). Any such amendment or waiver shall be binding upon the Collateral Agent and each Secured Party, each holder of any of the Secured Obligations and the Obligor.

(b) Annex 1 hereto may be amended at any time to change the list of Issuers therein by having a supplemental Annex 1 signed by the Obligor and countersigned by the Collateral Agent. The Collateral Agent shall attach each such supplemental Annex 1 to an

Pledge and Security Agreement

original of this Agreement and shall promptly provide copies thereof to the other Secured Parties.

6.05 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of each Obligor, the Secured Parties, including the Collateral Agent, and each other holder of any of the Secured Obligations (provided, however, that no Obligor shall assign or transfer its rights hereunder without the prior written consent of the Collateral Agent).

6.06 Captions. The captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

6.07 Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart.

6.08 Governing Law. This Agreement shall be governed by, and construed in accordance with, the law of the State of New York.

6.09 Agents and Attorneys-in-Fact. The Collateral Agent may employ agents and attorneys-in-fact in connection herewith and shall not be responsible for the negligence or misconduct of any such agents or attorneys-in-fact selected by it in good faith.

6.10 Severability. If any provision hereof is invalid and unenforceable in any jurisdiction, then, to the fullest extent permitted by law, (i) the other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in favor of the Collateral Agent and the Secured Parties in order to carry out the intentions of the parties hereto as nearly as may be possible and (ii) the invalidity or unenforceability of any provision hereof in any jurisdiction shall not affect the validity or enforceability of such provision in any other jurisdiction.

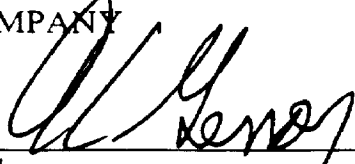
6.11 Accession; Material Domestic Subsidiaries. Promptly (and in no case later than three weeks) after any Person becomes a Material Domestic Subsidiary, BNS will cause such Person to execute and deliver, and become a party to, this Agreement as an Obligor pursuant to an instrument in form and substance satisfactory to the Collateral Agent, and at such time such Person and the Collateral Agent may supplement any Annex hereto solely to add Collateral granted or purported to be granted by such Person under Section 3 hereof.

Pledge and Security Agreement

IN WITNESS WHEREOF, the parties hereto have caused this Pledge Agreement to be duly executed and delivered as of the day and year first above written.

OBLIGOR(S)

BROWN & SHARPE MANUFACTURING
COMPANY

By  _____

Title: Vice President and Chief Financial Officer
Andrew C. Genor

COLLATERAL AGENT

THE CHASE MANHATTAN BANK,
as Collateral Agent

By _____

Title:

Pledge and Security Agreement

IN WITNESS WHEREOF, the parties hereto have caused this Pledge Agreement to be duly executed and delivered as of the day and year first above written.

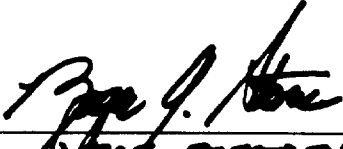
OBLIGOR(S)

BROWN & SHARPE MANUFACTURING
COMPANY

By _____
Title:

COLLATERAL AGENT

THE CHASE MANHATTAN BANK,
as Collateral Agent

By 
Title: Peter J. Stone
VICE PRESIDENT

ANNEX 1

PLEDGED SECURITIES

[See Section 2(d)]

Securities Pledgor	Issuer	Certificate No.	Principal Amount/ No. of Shares	Class/Series	Par Value
Brown & Sharpe Manufacturing Company	Trans World Airlines	C 53337	7 Shares	Common Stock	\$0.01
Brown & Sharpe Manufacturing Company	Trans World Airlines	W 14111	2 Warrants	Warrants	\$0.01
Brown & Sharpe Manufacturing Company	Seatrain Lines Inc.	SLC 0161	496 Shares	Common Stock	\$0.01
Brown & Sharpe Manufacturing Company	Seatrain Lines Inc.	SLW 0383	154 Warrants	Warrants	\$0.01
Brown & Sharpe Manufacturing Company	Harvard Industries, Inc.	HI 0756	43 Shares	Common Stock	\$0.01
Brown & Sharpe Manufacturing Company	Brown & Sharpe Surface Inspection Systems Inc.	1	4,000 Shares	Common Stock	
Brown & Sharpe Manufacturing Company	BSIS Inc.	1	1,000 Shares	Common Stock	\$1.00
Brown & Sharpe Manufacturing Company	Borel & Dunner, Inc.	2	500 Shares	Common Stock	\$1.00
Brown & Sharpe Manufacturing Company	Automation Software Incorporated	5	800,000 Shares	Common Stock	\$0.01

INTELLECTUAL PROPERTY

[See Section 2(e)]

See attached.

Annex 3—Business Locations

NY3:#7228361v3

Schedule of Brown & Sharpe Manufacturing Company
and Domestic Subsidiaries
U. S. and Foreign Patents

<u>Country</u>	<u>Serial No.</u>	<u>Filed</u>	<u>Patent No.</u>	<u>Issued</u>	<u>Expiration Date</u>	<u>Inventor(s)</u>	<u>Owner</u>	<u>Title/Description</u>
US			5,459,576	10/17/95		Andrei Brunfeld, Gregory Tokor, Zvi Yauiv, Ilan Laver	B&S Surface Inspection Systems	Differential Phase Contrast Inspection System
US			5,638,175	6/10/97		Andrei Brunfeld, Gregory Tokor, Zvi Yauiv, Ilan Laver	B&S Surface Inspection Systems	Differential Phase Contrast Inspection System
Europe			672,900	9/20/95			B&S Surface Inspection Systems	
Japan			9229652	9/5/97			B&S Surface Inspection Systems	
US	new appln	10/18/99				Clay Toruquist, Paul F. Caswell, Donald G. Turcotte	BSIS Inc.	Extensible Metrology System

Expiration

<u>Country</u>	<u>Serial No.</u>	<u>Filed</u>	<u>Patent No.</u>	<u>Issued</u>	<u>Date</u>	<u>Inventor(s)</u>	<u>Owner</u>	<u>Title/Description</u>
US	08/441,967	5/16/95	5,616,917	4/1/97		YuZhong Dai	B&S	A Device for Measuring an Angle between Pivotally Connected Members
PCF	US96/06926	5/15/96						
Germany	196 81 396.4	11/13/97						
Japan	535002/96							
US	08/523,048	9/1/95	5,671,541	9/30/97	9/1/2015	YuZhong Dai, Thomas Chaddon, Jr.	B&S	Accuracy Verification Devices for CMMs
US	988,467	12/10/92	5,347,723	9/20/94	9/20/2011	Gary W. Russell	B&S	Air Bearing Control System
PCF	US93/11929	12/8/93						
Europe	94905348.2	12/8/93	0701663	7/29/98				
France								
Germany								
Italy								
Japan	514372/94	12/8/93						
Spain								
UK								
US	09/231,148	1/15/99				Ken Sheehan	B&S	Apparatus & method for calibrating a probe assembly of a measuring machine
US	107,104	10/9/87	4,815,213	3/28/89	3/28/2006	William J. McCabe, Vitaly I. Pesikov	B&S	Apparatus for Temperature Compensation of Sensing Means of a Machine
PCF	US88/03400	9/30/88						
Brazil								
Europe	88909901.6							
Japan								
US	106,614	10/6/87	4,763,420	8/16/88	8/16/2005	William J. McCabe, Vitaly I. Pesikov	B&S	Base Assembly for CMM
PCF	US88/03379	9/30/88						
Brazil								
Europe	88909048.6							
Japan								

<u>Country</u>	<u>Serial No.</u>	<u>Filed</u>	<u>Patent No.</u>	<u>Issued</u>	<u>Expiration Date</u>	<u>Inventor(s)</u>	<u>Owner</u>	<u>Title/Description</u>
US	08/523,014	9/1/95	5,832,416	11/3/98	9/1/2015	Paul Anderson	B&S	Calibration System for CMM
PCT Europe Japan	US96/13839 96929771.2	8/29/96						
US	122,771	11/19/87	4,884,889	12/5/89	12/5/2006	Walter L. Beckwith, Jr.	B&S	Calibration System for CMM
PCT Europe	US88/03855 88910276.0	10/3/88 10/31/88	0,386,115B2 reissued in amended form 0386115 P38 86 767.2 0,386,115	issued				
France Germany Italy Japan UK	509394/88		0,386,115	issued				
US	08/748,052 (cont. of 08/441,972)	11/12/96	5,669,150 (utility pat.)	9/23/97	11/12/2016	Raymond J. Guertin, YuZhong Dai, Vitaly Peskov, Walter Beckwith, Thomas Charlton, Jr.	B&S	CMM Having Articulated Arm
PCT Germany Japan	US96/06913 197 81 395.6	5/15/96 11/13/97						
US	309,692	2/10/89	4,958,437	9/25/90	9/25/2007	Israel F. Helms	B&S	CMM with Vibration Damper
US	07/405,541	9/11/89	5,042,162 (related to 4,958,437)			Israel F. Helms	B&S	CMM with Vibration Dampening System
PCT	US90/05094	9/10/90						
US	48,765	4/16/93	5,418,730	5/23/95	5/23/2012	Michael A. Mariani, Kenneth L. Sheehan	B&S	Control Axis Mounted Computer Interface for CMMs
PCT Europe Japan	US94/04203 94913423.3 523500/94	4/15/94 4/15/94						

<u>Country</u>	<u>Serial No.</u>	<u>Filed</u>	<u>Patent No.</u>	<u>Issued</u>	<u>Expiration Date</u>	<u>Inventor(s)</u>	<u>Owner</u>	<u>Title/Description</u>
US	09/149,192	9/8/98				Tom Charlton	B&S	Coordinate measuring machine having a machine tool frame (utility)
PCT		8/20/99						
Canada		8/20/99						
Europe		8/20/99						
Japan		8/20/99						
Mexico		8/20/99						
US	07/309,691	2/10/89				Israel F. Helms	B&S	Counterbalance for CMM
US	925,323	10/31/86	4,835,871	6/6/89	6/6/2006	Vitaly I. Pesikov	B&S	Counterweight for CMM
US	07/360,009	6/1/89	4,949,465 (CIP of 4,835,871)	8/21/90	8/21/2007	Vitaly I. Pesikov	B&S	Counterweight for CMM
US	179,064	4/8/88	4,926,360	5/15/90	5/15/2007	Stanley T. Spink, Jr.	B&S	Electronic Gage Amplifier and Display
PCT		3/30/89						
Europe								
Japan								
US	108,143	10/14/87	4,802,774	2/7/89	2/27/2006	Vitaly I. Pesikov	B&S	Gas Bearing for Guiding Relative Movement of Precision Machine Parts
PCT		9/30/88						
Europe								
US	309,428	2/10/89	4,946,293	8/7/90	8/7/2007	Israel F. Helms	B&S	Gas Bearing Having an Auxiliary Reservoir
PCT								
Europe								
Japan								
US	569,997	1/11/84	4,492,036	1/8/85	1/8/2002	Walter L. Beckwith, Jr.	B&S	Magnetic Ball Bar Gauge
US			4,187,612	2/12/80	2/12/1997	Scott	B&S	Height Gage
US			4,191,059	3/4/80	3/4/1997	Vanstele	B&S	Linear Actuator

Country	Serial No.	Filed	Patent No.	Issued	Expiration Date	Inventor(s)	Owner	Title/Description
US		6/10/88	4,833,630	5/23/89	5/23/2006	Braman, Honer	B&S	Method & Apparatus for Tri-dimensional Measurement of an Object
EPC Japan Korea								
US		10/9/87	4,866,643	9/12/89	9/12/2006	Werner Duttler	B&S	Method for Automatic Compensation of Probe Offset in a CMM
US	193,069	5/12/88	4,939,678 (CIP of 4,884,889)	7/3/90	7/3/2007	Walter L. Beckwith, Jr.	B&S	Method for Calibration of CMM
US	08/670,176	6/20/96	5,822,877	10/20/98	6/20/2016	Yu Zhong Dai	B&S	Multi-Probe System for Dimensional Metrology
US	09/149,213	9/8/98						
PCT	PCT/US99/19 025	8/20/99						
Canada		8/20/99						
Europe		8/20/99						
Japan		8/20/99						
Mexico		8/20/99						
US	706,953	5/29/91	5,211,768	8/3/93	8/3/2010	Richard Sansom, Richard MacManus	B&S	Power assist manual coordinate measuring machine & method for using same (utility pat)
US	150,122	3/24/92	5,430,950 (CIP of 5,211,768)	7/11/95	7/11/2012	Walter L. Beckwith, Jr. Walter L. Beckwith, Jr.	B&S B&S	Stacked Block Step Gauge Stacked Block Step Gauge
PCT	US92/04379	5/24/92						
Europe								
Germany	92913065.6	5/4/92	0,586,563 P6922 62 69.5	7/15/98				
Japan								
UK	500493/93	5/24/92	0,586,563					

<u>Country</u>	<u>Serial No.</u>	<u>Filed</u>	<u>Patent No.</u>	<u>Issued</u>	<u>Expiration Date</u>	<u>Inventor(s)</u>	<u>Owner</u>	<u>Title/Description</u>
US	08/552,552	11/3/95	5,830,094	11/3/98	11/3/2015	Jan de Nijs	B&S	Transmission for Converting Rotary Motion into Linear Motion
US	08/778,698 (div. of 08/552,552)	1/3/97	5,690,567 (utility pat.)	11/25/97	1/3/2017	Jan de Nijs, Matthias Lindner	B&S	Transmission for Converting Rotary Motion into Linear Motion
US	379,882	1/27/95	5,535,524	7/16/96	7/16/2013	Paul W. Carrier, Richard A MacManus	B&S	Vibration Damper for CMM
PCT Europe Japan	US95/00175 96903362.0	1/16/96 1/16/96						

BROWN & SHARPE**U.S. TRADEMARKS**

.000 & LOGO Application # 75/522,897 filed: 7/16/98 date 1st used: 12/97

- Class 9, manual & computer controlled CMM machines, hardware & software for CMM machines, etc.

B & S LOGO Application # 243,768 filed: 4/19/66 date 1st used: 1897
 Registration # 825,728 reg.: 3/14/67
 exp: 3/14/07

- Class 26, Machinists' hand gaging tools, such as micrometers, etc.

BESTEST Application # 44,158 filed: 1/17/58 date 1st used: 3/14/56
 Registration # 676,478 reg: 3/31/59
 exp: 3/31/09

- Class 26, Dial indicators for indicating movement of a feeler in small parts of a measurement unit.

BROWN & SHARPE

Application # 74/112,443 filed: 11/5/90 date 1st used: 1973
 Registration # 1,674,776 reg: 2/11/92
 exp: 2/11/02

- Int. Class 6, Metal swivel vices & metal pin vices.

Application # 74,113,641 filed: 11/8/90 date 1st used: 1/1/73
 Registration # 1,719,019 reg: 9/22/92
 exp: 9/22/02

- Int. Class 42, Application engineering, computer software development & designing, software consulting services.

Application # 74/112,693 filed: 11/5/90 date 1st used: 1973
 Registration # 1,658,029 reg: 9/24/91
 exp: 9/24/01

- Int. Class 8, Hand tools, namely, straight edges, parallels, V blocks & clamps, etc.

Application #74/113,523 filed: 11/8/90 date 1st used: 1973
 Registration # 1,660,670 reg: 10/15/91
 exp: 10/15/01

- Int. Class 9, Electronic CMMs & parts therefore, etc.

brown & sharpe & LOGO

Application # 75/449,707 filed: 3/13/98 date 1st used: 12/97

- Int. Class 9, Manual & computer controlled CMM machines, hardware & software for CMM machines, etc.

DIAL-CAL

Application # 162,013 filed: 3/13/78 date 1st used: 12/1969
 Registration # 1,125,940 reg: 10/16/79
 exp: 10/16/99
 Renewal requested: 10/5/99

- Int. Class 9, measuring caliper.

DIGIT-CAL

Application # 166,740 filed: 4/17/78 date 1st used: 11/18/77
 Registration # 1,105,564 reg: 11/ 7/78
 exp: 11/ 7/08

- Int. Class 9, digital readout caliper for measuring dimensions.

DIGIT-HITE

Application # 168,646 filed: 5/ 1/78 date 1st used: 11/18/77
 Registration # 1,115,573 reg: 3/27/79
 exp: 3/27/09

- Int. Class 9, Apparatus for measuring height, namely electronic digital height gage.

HITE-CHEK

Application # 44,155 filed: 1/17/58 date 1st used: 3/14/56
 Registration # 676,477 reg: 3/31/59
 exp: 3/31/09

- Class 26, Indicator supports for measuring instruments.

HITE-ICATOR Application # 44,156 filed: 1/17/58 date 1st used: 12/11/57
Registration # 666,866 reg: 9/ 9/58
exp: 9/ 9/08

- Class 26, micrometer height gage with dial indicator.

INTRIMIK Application # 75/571,648 filed: 10/14/98 date 1st used: 4/4/52
(this trademark was previously registered and expired on 12/31/88)

- Int. Class 9, Micrometers.

JO BLOCKS Application # 469,594 filed: 4/24/44 date 1st used: 3/22/44
Registration # 408,940 reg: 9/ 5/44
exp: 9/ 5/04

- Int. Class 9, Precision gage blocks.

MAGNICATOR Application # 75/570,596 filed: 10/14/98 date 1st used: 3/15/55
(this trademark was previously registered, abandoned and expired on 12/27/95)

- Int. Class 9, dial indicator stand.

MEMO-TEST Application # 326,995 filed: 9/8/81 date 1st used: 1/2/80
Registration # 1,228,285 reg: 2/22/83
exp: 2/22/03

- Int. Class 9, Bi-directional gage heads.

MICR-A-SIZE Application # 487,248 filed: 6/27/84 date 1st used: 8/23/83
Registration # 1,331,723 reg: 4/23/85
exp: 4/23/05

- Int. Class 7, surface grinders.

MICRO-HITE Application # 725,850 filed: 5/2/88 date 1st used: 10/86
Registration # 1,527,928 reg: 3/7/89
exp: 3/7/09

- Int. Class 9, electronic height gauges.

MICROVAL Application #666,642 filed: 6/15/87 date 1st used: 4/16/87
 Registration # 1,457,761 reg: 2/9/88
 exp: 2/9/08

- Int. Class 9, CMM for use in industrial & manufacturing applications.

MICROXCEL Application # 75/032,549 filed: 12/14/95 date 1st used: 6/16/93
 Registration # 2,030,024 reg: 1/14/97
 exp: 1/14/07

- Int. Class 9, CMMs.

ORYZO Application # 74/683,011 filed: 6/1/95 date 1st used: 12/30/94
 Registration # 2,053,385 reg: 4/15/97
 exp: 4/15/07

- Int. Class 9, CMMs.

REFLEX Application # 2/23/2005 filed: 6/11/96 date 1st used: 12/20/96
 Registration # 2,226,510 reg: 2/23/99
 exp: 2/23/09

- Int. Class 9, operating system measurement software for use with a CMM.

XCEL Application # 725,849 filed: 5/2/88 date 1st used: 2/88
 Registration # 1,515,252 reg: 12/6/88
 exp: 12/9/08

- Int. Class 9,CMM

ZMOUSE Application # 74/382,870 filed: 4/21/93 date 1st used: 4/93
 Registration # 1,973,883 reg: 5/14/96
 exp: 5/14/06

- Int. Class 9,Computer interface device used in conjunction with application software for a CMM.

Revised by S. Kearney
 1/11/00

BUSINESS LOCATIONS, ETC.

[See Section 5.07]

<u>Obligor</u>	<u>Taxpayer Identification No.</u>	<u>Business Location</u>	<u>Chief Executive Office (Yes/No)</u>	<u>Equipment/ Inventory at Location (Yes/No)</u>
Brown & Sharpe Manufacturing Company	050113140	Precision Park 200 Frenchtown Road Town of North Kingstown County of Washington State of Rhode Island 02852	Yes	Yes
Brown & Sharpe Manufacturing Company	050113140	70 Parker Avenue City of Poughkeepsie County of Dutchess State of New York	No	Yes
Brown & Sharpe Manufacturing Company	050113140	1550 Todd Farm Drive, Inc. 385 Airport Road "M" Unit 3 Elgin, Illinois 60123	No	Yes
Brown & Sharpe Manufacturing Company	050113140	51170 Grand River Avenue Wixom, Michigan 48393	No	Yes
Brown & Sharpe Manufacturing Company	050113140	9401-P Southern Pines Blvd. Charlotte, North Carolina 28210	No	Yes
Brown & Sharpe Manufacturing Company	050113140	10012 International Blvd. Cincinnati, Ohio 45246	No	Yes
Brown & Sharpe Manufacturing Company	050113140	Linbar Business Center Suite 290 Nashville, Tennessee	No	Yes

TRADEMARK

REEL: 002025 FRAME: 0100

RECORDED: 01/14/2000

Annex 3—Business Locations