

## **ROLL GRINDING MACHINE VIBRATION ANALYSIS PROJECTS CARRIED OUT (1987 – 2011)**

### **TATA STEEL - PORT TALBOT INTEGRATED WORKS - UK**

Farrel No.1  
Farrel No.2  
Cincinnati No.1  
Churchill No.2 (Hot Mill)  
Churchill No.3 (Hot Mill)  
Churchill No.4 (Hot Mill)  
Craven No.1  
Waldrich Siegen No.1  
Waldrich Siegen No.3  
Waldrich Siegen No.4  
Churchill No.1 (Cold Mill)  
Churchill No.2 (Cold Mill)  
Churchill No.3 (Cold Mill)

### **TATA STEEL - LLANWERN INTEGRATED WORKS - UK**

Churchill M0  
Churchill M1  
Naxos Union M2  
Naxos Union M3  
Naxos Union M4  
Farrel M11  
Farrel M12  
Churchill M14  
Waldrich M15

### **BRITISH STEEL - RAVENS CRAIG INTEGRATED WORKS - UK**

Waldrich Siegen No.1  
Churchill No.1  
Churchill No.2

### **TATA STEEL - SHOTTON FINISHING WORKS - UK**

Waldrich Siegen No.31  
Mesta No.32  
Churchill No.22  
Churchill No.33  
Churchill No.34

### **TATA STEEL - TROSTRE WORKS - UK**

Waldrich No.1  
Waldrich No.3  
Waldrich No.4  
Waldrich No.5  
Farrel 30-inch  
Farrel 60-inch  
Farrel 28-inch

### **CORUS TINPLATE - EBBW VALE WORKS - UK**

Waldrich No.6  
Waldrich No.7  
Waldrich 850 North  
Waldrich 750 North

### **OUTOKUMPU - SHEFFIELD WORKS - UK**

Churchill No.1  
Churchill No.2  
Naxos Union No.2

**ARCELOR MITTAL - BURNS HARBOR PLANT - INDIANA USA**

Farrel No.1  
Farrel No.3  
Farrel No.4  
Farrel No.6  
Pomini No.2 CNC grinder  
Pomini No.3 CNC grinder  
Pomini No.5 CNC grinder

**ARCELOR MITTAL – CLEVELAND WORKS – OHIO USA**

60-inch Farrel (No.3 Cold Mill)  
36-inch Farrel (No.3 Cold Mill)  
No.3 Farrel (DHCC)  
No.4 Farrel (DHCC)  
28-inch Farrel (No.2 Roll Shop)  
36-inch Farrel (No.2 Roll Shop)

**US STEEL – GRANITE CITY DIVISION – ILLINOIS USA**

No.1 Mesta  
No.2 Mesta

**NUCOR STEEL – MINIMILL – DECATUR, ALABAMA, USA**

Farrel grinder

**ARCELOR MITTAL – INTEGRATED STEEL PLANT – WEIRTON, WEST VIRGINIA, USA**

No.5A Mesta work roll grinder

**ARCELOR MITTAL – INTEGRATED STEEL PLANT – SPARROWS POINT, MARYLAND, USA**

No.4A Voith CNC work roll machine (Bethlehem Roll Technology)  
No. K6 Farrel back-up machine

**USS-POSCO INDUSTRIES – STEEL PLANT – PITTSBURG, CALIFORNIA, USA**

No.3 Herkules CNC back-up roll grinder  
No.4 Herkules CNC work roll grinder

**ARCELOR MITTAL – INTEGRATED STEEL PLANT – HAMILTON, ONTARIO**

No.3 Pomini CNC work roll grinder

**ARCELOR MITTAL - INTEGRATED STEEL PLANT- DUNKERQUE, FRANCE**

Farrel No.1  
Farrel No.2  
Cincinnati No.1  
Cincinnati No.2  
Waldrich

**ARCELOR MITTAL\_– INTEGRATED STEEL PLANT - FOS SUR MER, FRANCE**

Pomini CNC work roll grinder

**ARCELOR MITTAL – INTEGRATED STEEL PLANT - PUERTO SAGUNTO, SPAIN**

Pomini CNC work roll grinder

**ARCELOR MITTAL - INTEGRATED STEEL PLANT – AVILES, SPAIN**

Pomini HD409 work roll grinder

**OUTOKUMPU – TORNIO - FINLAND**

Pomini CNC combination grinder

**COCKERILL SAMBRE SA – INTEGRATED STEEL PLANT – LIEGE, BELGIUM**

Pomini CNC work roll grinder (Cold Mill)  
Giustina G1 work roll grinder (Cold Mill)  
Pomini CNC work roll grinder (Hot Mill)

**ERDEMIR - INTEGRATED STEEL PLANT - EREGLI, TURKEY**

56-inch Farrel (hot mill)  
28-inch Farrel (cold mill)

**IMPHY SA - SPECIALITY STEEL PLANT - NEVERS, FRANCE**

Herkules No.115

**BAOSTEEL – INTEGRATED STEEL PLANT – SHANGHAI, CHINA**

Herkules No.104 CNC work roll grinder  
Herkules No.105 CNC combination grinder

**ESSAR STEEL – SURAT – INDIA**

Floor vibration survey at site of new roll grinding machine installation

**UTTAM GALVA STEELS – KHOPOLI, MUMBAI, INDIA**

CNC1 work roll grinder  
CNC2 combination roll grinder  
Craven manual roll grinder

**SAHAVIRIYA STEEL INDUSTRIES - STEEL PLANT – BANG SAPHAN, THAILAND**

Innse No.1 combination grinder  
Innse No.2 combination grinder

**ALUMINIUM CORPORATION - DOLGARROG – UK**

Churchill roll grinder

**NOVELIS - ROGERSTONE - UK**

Naxos Union N500  
Naxos Union N1000  
Waldrich No.1

**ALCAN ROLLED PRODUCTS - GLASGOW - UK**

Herkules CNC roll grinder

**NOVELIS – BRIDGNORTH – UK**

Herkules work roll grinder

**BRIDGNORTH ALUMINIUM – BRIDGNORTH - UK**

Herkules CNC combination roll grinder  
Churchill back-up roll grinder

**NOVELIS - TERRE HAUTE - INDIANA USA**

Herkules CNC roll grinder

**CONSOLIDATED ALUMINUM - HANNIBAL - OHIO USA**

Waldrich Siegen CNC roll grinder

**NORANDAL USA INC. - ALUMINUM FOIL PLANT - N. CAROLINA USA**

Naxos Union RG2

**ALCOA - INTEGRATED ALUMINUM PLANT - DAVENPORT, IOWA, USA**

No.4 Cincinnati  
Waldrich EO1  
No.10 Herkules  
No.11 Herkules  
No.12 Herkules

**ALCOA – INTEGRATED ALUMINIUM PLANT – KNOXVILLE, TENNESSEE, USA**

Waldrich Siegen WS1 CNC roll grinder  
Waldrich Siegen WS2 CNC roll grinder

**ALCOA – ALUMINIUM PLANT – BOHAI, CHINA**

32-inch Farrel work roll grinder

**LOGAN ALUMINUM – ALUMINIUM PLANT – RUSSELLVILLE, KY, USA**

Herkules RG4 work roll grinder  
Waldrich RG1 back-up roll grinder

**ALCAN GLOBAL AEROSPACE – RAVENSWOOD W.V. – USA**

54-inch Lyons work roll grinder  
Capco CNC combination grinder

**ALCAN SPECIALITY SHEET - ALUMINIUM PLANT - NEUF BRISACH, FRANCE**

Cincinnati RE1  
Waldrich RE5  
Waldrich RE6  
Farrel RE8

**NOVELIS DEUTSCHLAND - GOETTINGEN - GERMANY**

Herkules roll grinder

**NOVELIS DEUTSCHLAND - OHLE - GERMANY**

Herkules WS301 roll grinder

**NOVELIS DEUTSCHLAND - NACHTERSTEDT - GERMANY**

SAXW 1250 CNC work roll grinder  
SAXW 1400 back-up grinder

**NOVELIS ITALIA – ALUMINIUM PLANT – PIEVE EMANUELE, ITALY**

Pomini CNC work roll and back-up roll grinder

**CARCANO ANTONIO SpA – ALUMINIUM FOIL PLANT – DELEBIO, ITALY**

Giustina work roll grinder

**NOVELIS BRASIL – PINDAMONHANGABA - BRAZIL**

No.2 Herkules CNC work roll grinder  
Waldrich WSIII back-up roll grinder

**NOVELIS – JEONGJU-SI – SOUTH KOREA**

Churchill work roll grinder

**TLM SIBENIK - ALUMINIUM FOIL PLANT - JUGOSLAVIA**

Churchill roll grinder

**HULLET ALUMINIUM - ALUMINIUM PLANT – PIETERMARITZBURG, SOUTH AFRICA**

Herkules WS300 work roll grinder

**GULF ALUMINIUM ROLLING COMPANY - ALUMINIUM PLANT – KINGDOM OF BAHRAIN**

Herkules combination roll grinder  
Toshiba work roll grinder

**FORGEMASTERS LTD. - ROLL MANUFACTURER - SHEFFIELD, UK**

Waldrich grinder

**DAVY ROLL COMPANY – ROLL MANUFACTURER – GATESHEAD, UK**

Churchill No.3 combination grinder

**STEINHOFF KALTWALZEN - ROLL MANUFACTURER - DINSLAKEN, GERMANY**

MSO 744 roll grinder  
MSO 2410 roll grinder  
Herkules WS351  
Herkules WS401  
Herkules UWS450  
Waldrich rough grinder

**FORCAST INT. SA - ROLL MANUFACTURER - SEDAN, FRANCE**

Waldrich No.1  
INNSE No.1

**TEXTURING TECHNOLOGY LTD – ROLL GRINDING AND TEXTURING PLANT – PORT TALBOT, UK**

Waldrich Siegen No.1 CNC work roll grinder  
Waldrich Siegen No.2 CNC work roll grinder  
Waldrich Siegen No.3 CNC combination grinder

**NORDCHROME - ROLL TEXTURING PLANT - THIONVILLE, FRANCE**

Herkules CNC roll grinder

In many of the above cases UNIVIB engineers' assistance was sought to troubleshoot specific surface finish problems affecting the performance of a machine. In other cases, investigations were carried out before and after refurbishment of a machine, to identify areas of the machine requiring attention prior to refurbishment, and then to assess the success of the refurbishment work, after re-installation. UNIVIB also has contracts with a number of the above Roll Shops to carry out regular vibration monitoring of all machines, usually on a quarterly basis. Names of contacts can be supplied if desired.