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 - RAVENSCRAIG 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 ALUMINIUM 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.