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Fort Vale Nuclear Ltd (FVNL) forms part of the Fort Vale Group, operating alongside Fort Vale Engineering Ltd. Located at its 72 acre state-of-the-art headquarters, **FVNL** operates from a purpose built facility of 804m² facility which was opened in 2013. We can offer a wide range of manufacturing solutions including: **advanced design service with rapid prototyping; lost wax investment casting foundry; manual and CNC milling and turning; laser cutting and plasma cutting/profiling; manual, robotic and seam welding; CNC sawing; tool room; press shop; general fabrication and assembly; stainless steel shot blasting and electro-polishing.**

We manufacture predominantly in stainless steel and also have experience in working with titanium, aluminium, duplex, nickel alloys (Hastelloy®) and carbon steel.

Fort Vale is a world leader in the design and precision manufacture of valves and fittings for transportable tanks with over 45 years' experience. The Fort Vale group of companies comprises six additional manufacturing entities, mostly in the engineering sector, with complementary skills including laser and water jet cutting, powder coating and CNC punch presses.

CNC Turning Centres 

Model	Capacity Ø
Mori Seiki SL 65B x 2	Up to 750mm
Mori Seiki SL 400	Up to 390mm
Mori Seiki NL 2000	Up to 200mm
Mori Seiki SL 603 BMC - driven tool	Up to 1000mm
Mori Seiki SL 250 x 2	Up to 230mm
Mori Seiki SL 35	Up to 390mm
Mori Seiki CL 25	Up to 250mm
Mori Seiki CL 1500M - driven tool	Up to 150mm
Mazak Nexus 200	Up to 200mm
Okuma LB 3000	Up to 200mm
Okuma LR 10	Up to 200mm
ROBOT LOADING	
Nakamura WT300 Gantry – twin turret, driven tool with Y axis milling	Up to 250mm
Mori Seiki ZL250G	Up to 250mm
Mori Seiki CL253G x 2	Up to 250mm
Mori Seiki CL25G	Up to 250mm
Mori Seiki CL200G	Up to 200mm



Model (Driven Tool)	Capacity Ø
Mori Seiki NLX4000BY - driven tailstock, driven tool with Y axis milling capability	Up to 460mm
Mori Seiki NLX3000Y – x3, driven tailstock, driven tool with Y axis milling capability	Up to 350mm
Mori Seiki NL2500SY – driven tool & Y axis	Up to 250mm
Mazak SQT 200	Up to 250mm
Okuma Multus B300 multi-tasking lathe	Up to 250mm
Mori Seiki NLX2500Y – x5, driven tailstock, driven tool with Y axis milling capability	Up to 250mm



Bar Feed	Capacity Ø
Nakamura WT150 – twin turret, driven tool with Y axis milling	Up to 65mm
Lynx 220B	Up to 50mm
Okuma LU15	Up to 45mm
Okuma LCC15-2S	Up to 38mm
Citizen M32V	Up to 32mm

CNC Machining Centres - Milling 

Model	Capacity X Y Z 4th
Mori Seiki SH630	840, 760, 840, 360
Mori Seiki NH6300DCG	1050, 900, 980, 360
Okuma MA-50HB	800, 650, 750, 360
Okuma MA500-HB	700, 900, 780, 360

Model	Capacity X Y Z
Okuma MA650 VB	1500, 660, 600
Mori Seiki NVX5100/40 – 13,000rpm & through spindle coolant with higher pressure	1050, 530, 510
Mori Seiki NVX7000/40 – 14,000rpm	1540, 760, 660



Welding & Fabrications

FORT VALE

Facility

Fronius TPSI MIG Plant

MIG/MAG – Fronius Transpluse 3200 GrNiEd x 7

TIG – Fronius Trantiz 3000 x 10; Magicwave 3000 x 5; Master TIG x 2

PAW – SAF Flatbed Plasma Welder 400 amps (1.3m long); SAF Cir Plasma Welder 800mm o/d

Cloos-Romat® 310 Twin Head Robotic Welders

ABB Flexarc Robotic Welding Cell with cold metal transfer weld plant

Lincoln 350 Powerwave – MIG Plant x 2



Trumpf Trulaser 3030 (L20) 6KW – 1.5m x 3m

CNC Messer Plasma Cutter – 1.5m x 3m



Facility

Bending

Presses

Ring rolling

Horizontal Press Break

Turntables

4 Rolls Morgan

4 Rolls Faccin

LVD Precision Hydraulic Press Brake with CADMAN software. Working length 3m, Force 1350KN.

NC-4 Roll Powered Bending Rolls - width up to 3100mm.

Rolling capacity 9mm stainless steel.

NC-Hydraulic Section Rolls

Size/Capacity

12mm thick, 2m length

12 off induction heating

4 off 40mm sq.section, up to 12mm thick at 300mm depth

Up to 10mm thick, 2m length

Up to 350 Kg

2500 Kg

3500 Kg

CNC Sawing

FORT VALE

Model

Kasto TEC A4C x 2

Kasto 420AU

Kasto 360AU

Kasto SSB260VA

Behringer HPB530A x 2

Kaltenbach Circular Tube Saw

Capacity Ø

Up to 450mm

Up to 420mm

Up to 360mm

Up to 260mm

Up to 450mm

Up to 150mm



Stainless Steel Metal Finishing

FORT VALE

Facility

HF Pickling plant

Electro-polishing plant

Ultrasonic cleaning

Shot blasting

Dry blasting

Fettling

Lifting capacity : 4000 Kg

Laser Marking

HK Technologies ND YAG x 2

ES Technologies Manlid Laser



Spline rolling/Thread rolling

FORT VALE

Model

Ort RP 18B Thread Roller

Ort MS5 Spline Roller

WMS 24D Spline Rack

Rolling Machine

Capacity

Up to Ø60 x 5mm pitch

Up to Ø45 x 115mm

50mm

Broaching

FORT VALE

Model

Stenhoj & Cardinal

Capacity

Max.shaft Ø25 x 40mm

Quality & Inspection

FORT VALE

Facility

Mitutoyo Crystal CMM

Sigma Scope Shadow Graph

Pressure testing facility

UV-Dark facilities for oxygen clean service

Custom-built oxygen clean facility

Helium leak detection facility

TESA-SCAN 52

FARO Gage portable CMM x 2

Positive material inspection (XRF)

FARO Edge 3D scan arm



In addition to these facilities, we have the following expertise:

- Material Scientist
- Qualified European Welding Engineer
- Qualified Welding Inspectors (CSWIP)
- Level II PCN and ASNT Liquid Penetrant Inspectors

Fort Vale Nuclear Ltd. is accredited with the following : ISO9001, OHSAS 18001, BS EN ISO 3834-2.



Fort Vale Nuclear Limited

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