



PLATE PROCESSING

SPECIFICATIONS AND CAPABILITIES



Plate Processing enquiries

0800 478 335 | quotes.npp@steelandtube.co.nz | steelandtube.co.nz

DISCLAIMER: This publication is intended to provide information to the best of our knowledge in regard to Steel & Tube's plate processing and press braking services and UltraPlate™. It does not constitute a complete description of the goods or an express statement about their suitability for any particular purpose. All measurements are displayed in millimeters unless otherwise stated.

Why use Steel & Tube for your Plate Processing?

Claim back the hours spent cutting, folding, drilling, and tapping

Quick Turnover

By pairing our distribution network with multiple processing plants, Steel & Tube achieves national coverage with quick turnover times. Often same day processing from file confirmation.

No Shortcuts on Tolerances

We carry out regular scheduled calibrations so you can have full confidence in the tolerances outlined in this booklet. Steel & Tube guarantees your product is within specification to our machine's capabilities.

Knowledgeable Team

With over 70 years of industry experience, your business and project are in safe hands. Whether you have programming files, CAD files, or hand drawings, Steel & Tube's plate processing team are ready to help.

Conscious about Sustainability

With coolant recovery systems and material optimisation programming, recycling waste is kept to minimal levels. For Green-star projects, Steel & Tube can also supply suitable steel solutions on request.



Materials

Mild Steel

Weathering



^ Superior G350 L15 Z35 plate, produced with structural fabricators in mind for when performance is Required. Ask us about UltraPlate or head to: steelandtube.co.nz/ultra-plate

How it Works

1. DESIGN YOUR PIECE

We work with DXF, DWG and NC files. Although, our team can help programme from drawings and 3D files. Steel & Tube welcome all enquiries for help on the design process.

2. CONTACT OUR PROCESSING TEAM

0800 478 335

quotes.npp@steelandtube.co.nz

68 Stonedon Drive, East Tamaki, Auckland

375 Blenheim Road, Upper Riccarton, Christchurch

3. CONFIRM PROCESSING ORDER

Our team work with you on confirming finishing details, tolerances, and refinements before processing from our North or South processing plants. At this stage, we can also arrange galvanizing by Perry Metal Protection if required.

4. NATIONWIDE DELIVERY

Using our distribution network, Steel & Tube can deliver your materials nationwide and across the pacific, including Tonga, Fiji, Samoa, and surrounding islands.

Plasma/Oxy Cutting

**Specification varies on plate thickness. Ask our team for confirmation.*

Programmed cutting for intricate shapes

Depending on the thickness of your piece, we process plate using Plasma arc cutting or Oxy fuel cutting. See below for the specifications of each method:

Bed size	15 m L x 3.1 m W x 300 mm D
Placement tolerance	+/- 2.0 mm

PLASMA CUTTING	MEASUREMENT
Sheet thickness	2 mm to 60 mm
Minimum curved radius	From 5 mm*
Minimum straight edge	From 4 mm*
OXY CUTTING	MEASUREMENT
Sheet thickness	60 mm to 300 mm
Minimum curved radius	From 15 mm*
Minimum straight edge	From 4 mm*



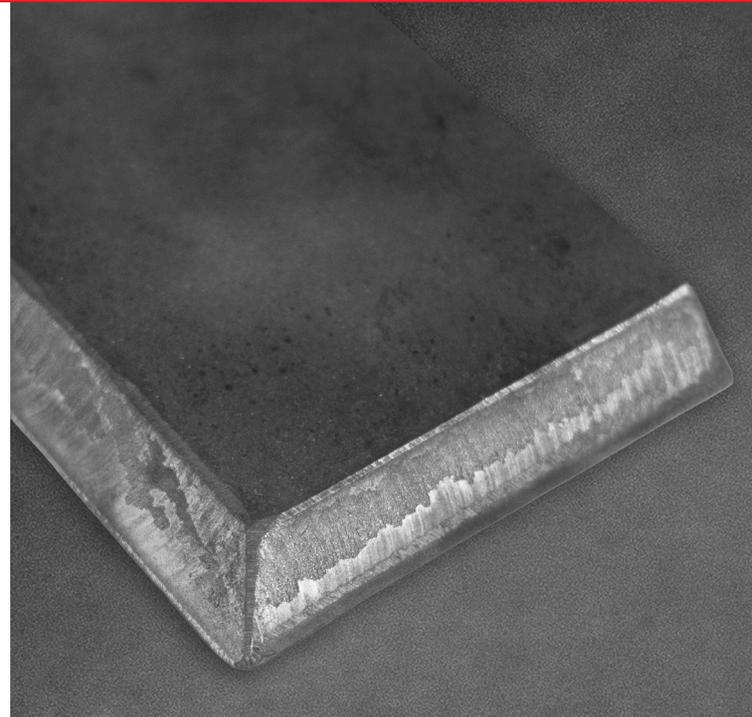
Bevelling

Edged refinement

Weld preparation or aesthetic touches, Steel & Tube offers the following plasma or oxy edge processing:

Standard Bevel	K Bevel	With landing
		

SPECIFICATION	MEASUREMENT
Minimum bevel thickness	6 mm
Maximum bevel thickness	60 mm
Minimum angle	55 deg
Angle tolerance	+/- 1 deg
AWS/ISO weld programs?	YES
Bevel standard	AS/NZS 1554 and ISO 9692



Folding

A brilliant option for custom brackets

Take your project and ideas to new levels with our pressbrake machine, turning flat steel into folded 3D products.

Our team are happy to help transfer your CAD files or drawings into a finished product, talk to our specialists today.

SPECIFICATION	MEASUREMENT
Maximum bending length	3.6 m (single hit)
Maximum thickness	32 mm
Angle range	0 deg to 179 deg
Accuracy	+/- 5 deg



Drilling & Tapping

Precise metric and imperial fitment

For when accuracy matters, you can get drilling programmed into your piece with tight positional tolerance. We can also tap holes for fittings, and provide countersinking or counter-boring.

Movement	3 axis
Positional tolerance	+/- 0.15 mm

DRILLING	MEASUREMENT
Maximum depth	100 mm (4")
Minimum diameter	3 mm
Maximum diameter	50 mm
TAPPING	MEASUREMENT
Thread types	Metric ISO, Imperial UNC/UNF
Metric size range	M6 to M24
Imperial size range	¼" to 1"
Minimum edge distance	1.5x hole diameter (M10 = 15mm)



Milling

Automated and repeatable products

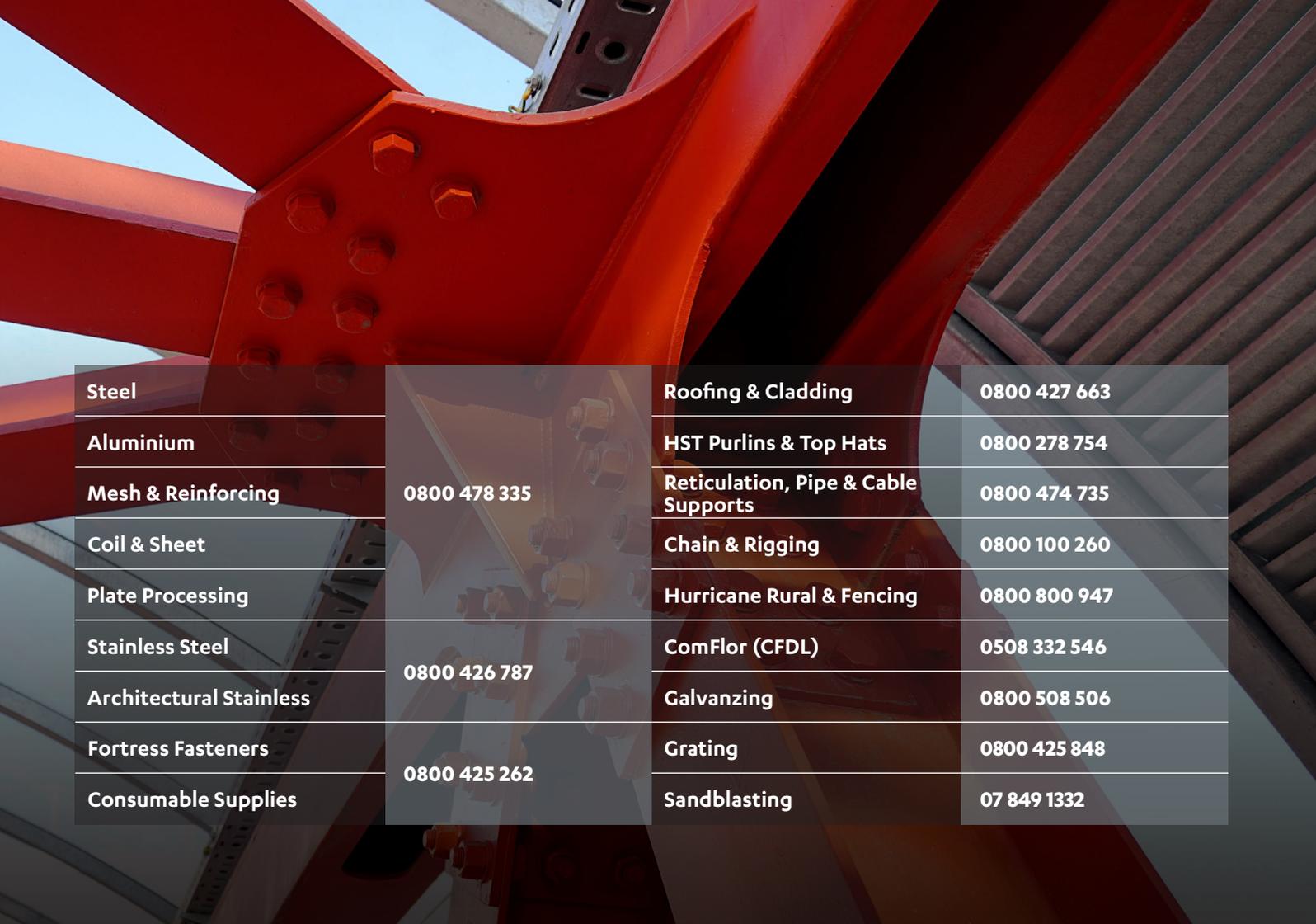
Whether it's prototyping or production, our milling capabilities and experience can turn your ideas into reality.

Slotting	Pocketing	Profiling
		
Keyways	Chamfers	Radius Edges
		

SPECIFICATION	MEASUREMENT
Positional tolerance (X/Y)	+/-0.15 mm per meter
Repeatability	+/-0.05 - 0.10 mm
Z-axis (spindle height)	+/-0.05 - 0.10 mm
Surface finish	Ra 3–6 μm^*

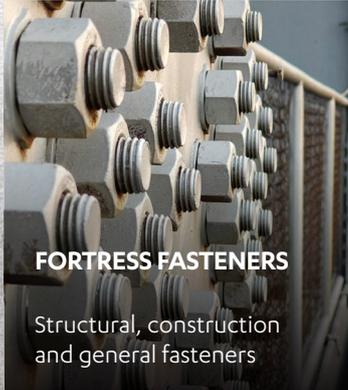
**Specification varies on tooling. Please ask for confirmation on your piece.*





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High quality grating manufactured to spec



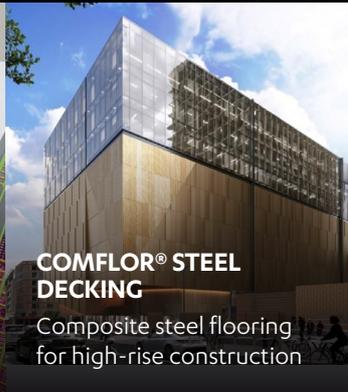
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With 3D BIM services for large estimations



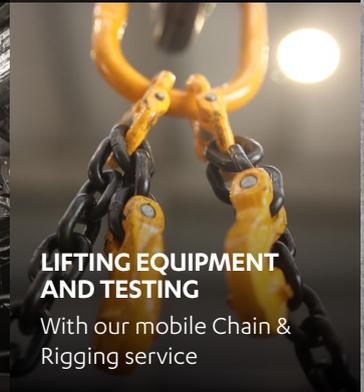
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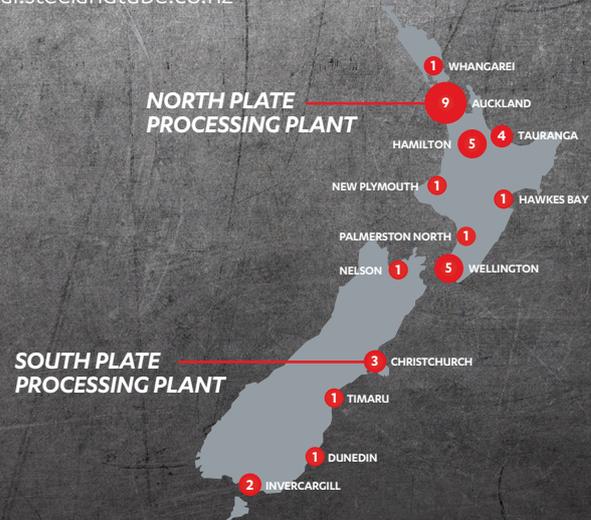


Webshop

portal.steelandtube.co.nz

NATIONWIDE STEEL SOLUTIONS

Steel & Tube offers a comprehensive range of steel related products and services through a nationwide distribution and processing network, so no matter where you are in the country we can deliver product to you.



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