Laser Hybrid Weld - Unprecedented High Efficiency

Laser Weld - Extremely fast, with perfect welds

Advantage 優勢

- **Welding speed** significantly increased, **production efficiency** noticeably **improved**
- **Number of weld layers** reduced, saving a large amount of **filler material**
- **Heat input** reduced, **material deformation rate** decreased
- **Heat input** is reduced, and the **effect** is greatly optimized



Application Scope 應用範圍

- Narrow and straight weld seams
- Thin-walled and thick-walled workpieces
- Materials with high thermal sensitivity
- Full penetration welding achievable for materials within 15mm







"Laser Welded Structural Fabrication Award APAC 2024"





高性能鋼——煌港特鋼
HIGH PERFORMANCE STEEL

STAY HUNGRY, CONTINUOUS INNOVATION

煌港特鋼 PEAK KONG SPECIAL STEEL

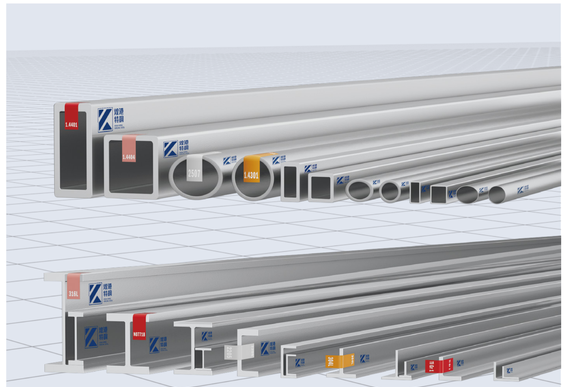
Peak Kong Special Steel

Unit B, 9/F,
Worldwide Centre,
123 Tung Chau Street,
Tai Kok Tsui,
Kowloon,
Hong Kong
香港九龍大角咀通州街123號國貿中心9樓B室

Tel: +852-29811161
Phone: +852-92995200 +852-92992995
E-mail: sales@peakkong.com
Web: www.peakkong.com.hk

煌港特鋼 PEAK KONG SPECIAL STEEL

高性能鋼——煌港特鋼
High Performance Steel



S690 & S960鋼結構型材
S690 & S960 Steel Structural Sections

Company Profile

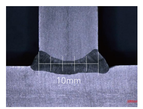
Our Service 業務範圍

- 不銹鋼結構型材
- 雙相/超級雙相不銹鋼結構型材
- 高性能合金不銹鋼型材
- 鈦合金結構型材
- 高強度鋼結構型材S690/S960
- 耐候鋼結構型材
- 複合結構型材
- 海上能源結構鋼型材
- Stainless steel structural Sections
- Duplex/Super Duplex Stainless Steel Structural Sections
- High-performance alloy stainless steel Sections
- Titanium alloy structural Sections
- High-strength steel structural profiles S690/S960
- Weathering Structural steel Sections
- Composite Steel Profiles
- Offshore energy structural steel Sections

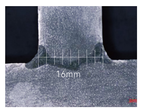
Superior Technology 先進技術

- Technology ~ Superior Design + Improving Structural capability
- Proactive Innovative Development in Automation, Design and Technology

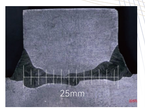
Weld Penetration Depth 焊縫熔深



11.5kW Power
10mm weld depth 1.4404



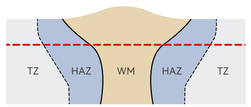
18kW Power
16mm weld depth 1.4404



20kW Power
25mm weld depth 1.4404



13kW Power
20mm weld depth S690QL



HAZ(熱影響區)



15kW Power
12mm weld depth



20kW Power
19mm weld depth

(welds highlighted for contrast)

Advanced High Strength Steel Structural Sections

The S690QL and S960QL high strength profiles of PeakKong Special Steel have higher tensile strength and yield strength than existing steel grades. The use of these high-strength materials will promote a more streamlined design of the structure, improving load capacity and energy efficiency.

Products	角鋼 Angles	T型鋼 Tee-sections	UPN/UPA/UPE槽鋼 UPN/UPA/UPE-channels
Ref. Norm	EN 10025-1/2	EN 10025	
Tolerances Norm	EN 10056	EN 10034	
Products	工字鋼 UB / UC	IPE工字鋼 IPE-beams	HEA/HEB型鋼 HEA/HEB-beams
Ref. Norm	EN 10025		
Tolerances Norm	EN 10034		

Advantage 優勢

- Less building and bridge self-weight
- Less foundation cost
- Best profiles feasible-can save more costs
- Laser hybrid weld-possible assembled profiles-possible
- Less steel used, improved section profiles





HSS Steel grade 高强度鋼級

S690 (690MPA)

- S690Q
- S690QL
- S690QL1

S960 (960MPA)

- S960Q
- S960QL
- S960QL1



Prefabricated Advanced High-strength Steel Structures
S690QL&S960QL Welded Structural Components







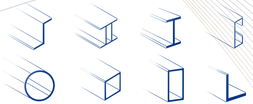
Stainless Steel Structure Profiles
不鏽鋼結構型材

Material 材質

- 304
- 316
- 316L
- 1.4301
- 1.4401
- 1.4404
- 1.4436
- 1.4462

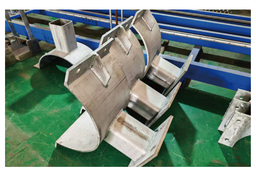


Custom profils can be manufactured to your exact specifications
可根據您的具體規格定制型材





Stainless steel products 不鏽鋼製品



2205 Stainless Steel Hose Clamp



Shek Wu Hui Sewage Treatment Plant E&M Installation Structural Parts



1.4404 Stainless Steel Channel Steel



MTR Stainless Steel Platform



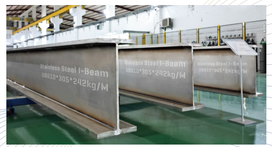
Duplex Stainless Steel Assembled Profiles

Duplex / Super Duplex Stainless Steel

Innovative Applications for Bridges and Corrosive Environment

2507(UNS S32570/1.4410)

2205(UNS S31803、S32205/1.4462)



Characteristic 特性

(1) 奧氏體 Austenitic and 鐵素體 Ferrite Stainless Steel (approx.50/50)

(2) Fatigue Strength >100% Normal SS 316L

(3) appro x 700 MPa Fatigue Strength 2205

(4) Strong Corrosion Resistance

(5) Higher Allow. Impact Load –Explosion / Impact

(6) Super Duplex – Corrosion Resistance –Seawater , Acid , Chlorine and Strain

Advantage 優勢

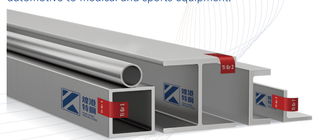
- No more external coating -less maintenance
- Less structural weight
- Cost=316L(1.4404),corrosive resistance(1.4404)–1.5 times
- Duplex/Super Duplex SS 2205 and 2507, Strong Corrosive Resistance

Titanium Alloy
鈦合金

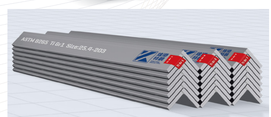
ASTM B337 / ASTM B338 / ASTM B861

ASTM B862 / DIN 17861 / ASTM B265

Renowned for their lightness and durability, titanium alloys are crucial in industries ranging from aerospace and automotive to medical and sports equipment.



- Ti Gr 1 (UNS R50250 / 3.7025)
- Ti Gr 2 (UNS R50400 / 3.7035)
- Ti Gr 7 (UNS R52400 / 3.7235)

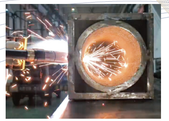






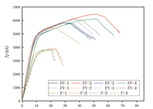
Composite Hollow Structural Sections the Future of Structures

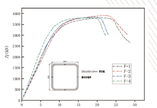
Full LASER Penetration Fusion Welded (LPFW) – ASSEMBLED PRODUCTS

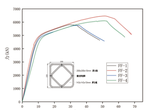


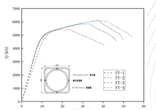












STRENGTH 1+1>2

- Strength = 1.8 times normal section
- Improve Usage – Mixed Grade – Corrosion Protections – Fatigue Improvement
- ASSEMBLED Sections Possible

- Assembled New Products -Combination of different **Shapes / Grades**
- Patented Assembled SECTIONS -Reduce Space / Weight + Increase Strength Improve NOFA



Cutting Edges Changes

- Weight Reduction >15%
- Strength > 80% – 150%
- Area occupied < 55%
- **Net Occupied Floor Area NOFA** + 55%



Grade Combination	
316L&316L	S690&S690
304&304	S960&S960
S355J0&S355J0	2507&2507
Ti Alloy&Ti Alloy	2205&2205