





# **Current Products**

#### 1. EXCAVATOR COMPONENTS



#### Lower Center Frames

- Number of variations: 23 types
- Models: 100/75/60/50/48/38/34/30/26/23/22/20/18/15/14 tons
- Number of production: 11,101 Units per year (2020)
- Production Location: Factory 1/ 2/ 3



#### **Side Frames**

- Number of variations: 28 types • Models: 100/ 60/ 50/ 48/ 42/ 38/ 34/ 30/ 25/ 22/ 20/ 18/ 15/ 14 tons • Number of production: 13,862 Units per year (2020)
- Production Location: Factory 1/2/3



#### **Outrigger Frames**

- Number of variations: 4 types
- Applying Models: 21/19/14 tons
- Number of production: 1,231 Units per year (2020)
- Production Location: Factory 3



#### **Track Frames**

- Number of variations: 7 types
- Models: 50/ 38/ 7/ 6/ 3.5/ 3 tons
- Number of production: 6,576 Units per year (2020)
- Production Location: KTC Factory



#### Main Frames

- Number of variations: 10 types
- Models: 13.5/ 12.5/ 7/ 6.5/ 6/ 5/ 3.5 tons
- Number of production: 5,815 Units per year (2020)
- Production Location: KTC Factory

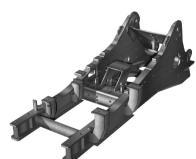


#### **Chassis Frames**

- Number of variations: 15 types
   Applying Models: 21/ 19/ 17/ 16/ 15/ 14/ 7/ 6 tons
- Number of production: 4,942 Units per year (2020)
- Production Location: Factory 3/ KTC

#### **Dozer Blades**

- Number of variations: 2 types
- Applying Models: 7 tons (2.3/ 2.2 m)
- Number of production: 1,324 Units per year (2020)
- Production Location: KTC Factory



#### **Middle Frames**

- Number of variations: 4 types
- Models: 50/ 48/ 42/ 38/ 34/ 22 tons
- Number of production: 3,314 Units per year (2020)
- Production Location: Factory 1/ 2/ 3



#### Arms

- Number of variations: 6 types
- Applying Models: 26/22/21/15/11 tons
- Number of production: 2,324 Units per year (2020)
- Production Location: KTC Factory





#### **Boom Top**

- Number of variations: 1 type
- Applying Models: 7 tons
- Number of production: 2,000 Units per year (2020)
- Production Location: KTC Factory

#### 2. LOADER & DOZER COMPONENTS



#### **Main Frames**

- Number of variations: 1 type
- Applying Models: 3 ton Track loaders
- Number of production: 199 Units per year (2020)
- Production Location: KTC Factory



#### **Brackets**

- Number of variations: 1 type
- Applying Models: 3 ton Track loaders
- Number of production: 199 Units per year (2020)
- Production Location: KTC Factory



#### Arms

- Number of variations: 1 type
- Applying Models: 3 ton Track loaders
- Number of production: 199 Units per year (2020)
- Production Location: KTC Factory



#### Supporters

- Number of variations: 1 type
- Applying Models: D65 Bulldozers
   Number of production: 27 Units per year (2020)
- Production Location: KTC Factory

#### 3. TURBO COMPRESSORS



#### SM Series (Packaged)

- Number of variations: 1 types
- Models: 7000
- Number of production:
- Production Location: Factory 2



#### SM100 Series (Packaged)

- Number of variations: 1 types
- Models: 7100
- Number of production:
- Production Location: Factory 2



#### Links

- Number of variations: 1 type
- Applying Models: D65 Bulldozers
- Number of production: 989 Units per year (2020)
- Production Location: KTC Factory





#### SM Series (Standard)

- Number of variations: 4 types
- Models: 3000/ 4000/ 5000/ 6000
- Number of production: 117 Units per year (2020)
- Production Location: Factory 2





#### SM100 Series (Standard)

- Number of variations: 5 types
- Models: 2100/ 3100/ 4100/ 5100/ 6100
- Number of production: 34 Units per year (2020)
- Production Location: Factory 2

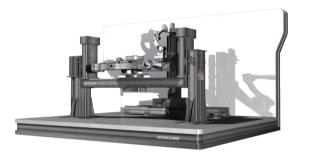
#### 4. ROBOTIC EQUIPMENT

# **Previous Products**



**CFL Welder Type A** 

- Number of variations: 2 types
- Models: WR-CFW-A/ WR-CFL-B
   Number of production: Self supply
- Production Location: Factory 2



#### TF Welder Type B

- Number of variations: 2 types
   Models: WR-TFW-A/ WR-TFW-B
- Number of production: Self supply
- Production Location: Factory 2



Products	Country	Company	Items	Period
Cable Tunnel	Singapore	SPPA (Singapore Power Assets)	Repetitive curved steel structure frames supporting the body of tunnel	2016-2018
Industrial Boilers	China	Yantai Hyundai Heavy Industries	Fabricated steel pipes for industrial boiler machines	2013-2016
Shipbuilding	Korea	<b>DSME</b> (Daewoo Shipbuilding & Marine Engineering)	T-bars for commercial vessels	2007-2012
Coal Mining	Austrailia	Ludowichi	Steel frame parts for industrial coal crushers	2007-2012
Oil Platform	China	Quingdao Tianshi Petroleum Machinery	Base, pump cover & body, gearbox assemblies for offshore oil platform	2007-2012
Train Bolsters	United Kingdom	EWS (England Wales & Scottish Railway)	Beams and frame assemblies for train bolsters	2007



- Number of variations: 2 types
   Models: WR-SPW-A/WR-SPW-B
- Number of production: Self supply
- Production Location: Factory 2

SF Duo Welder

• Number of variations: 1 type Models: WR-SFW

• Number of production: Self supply

Production Location: Factory 2

## Appendix: Current Products

Excavator Components



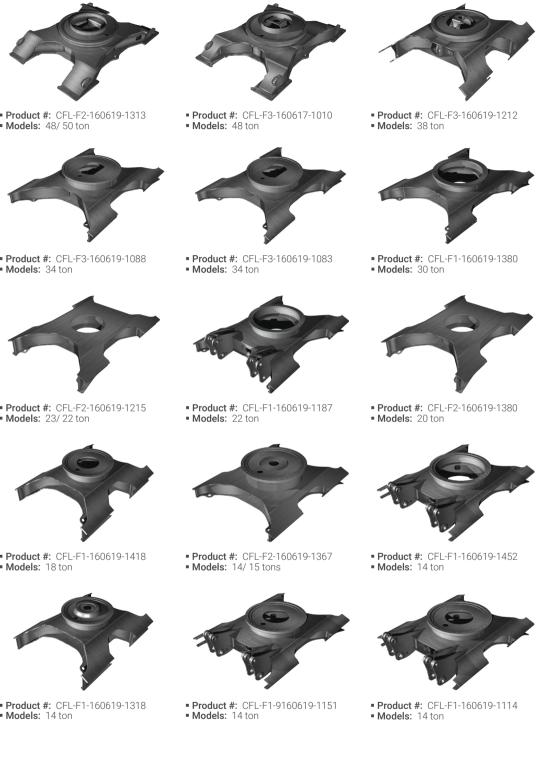


• Product #: CFL-F3-160617-1484 Models: 75 ton



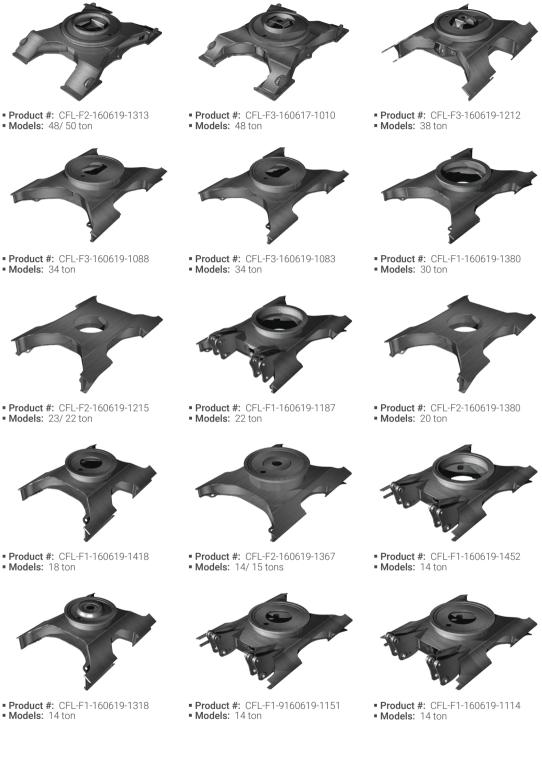


• Product #: CFL-F2-160617-1314 Models: 38 ton

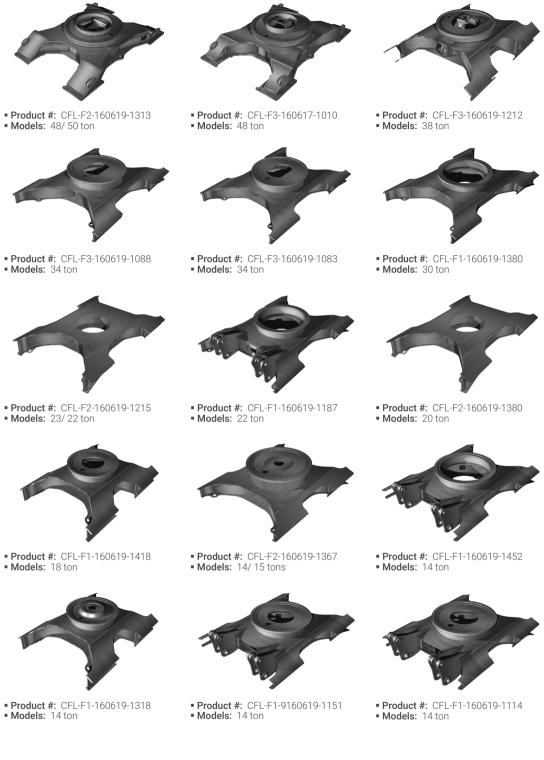


• Models: 34 ton



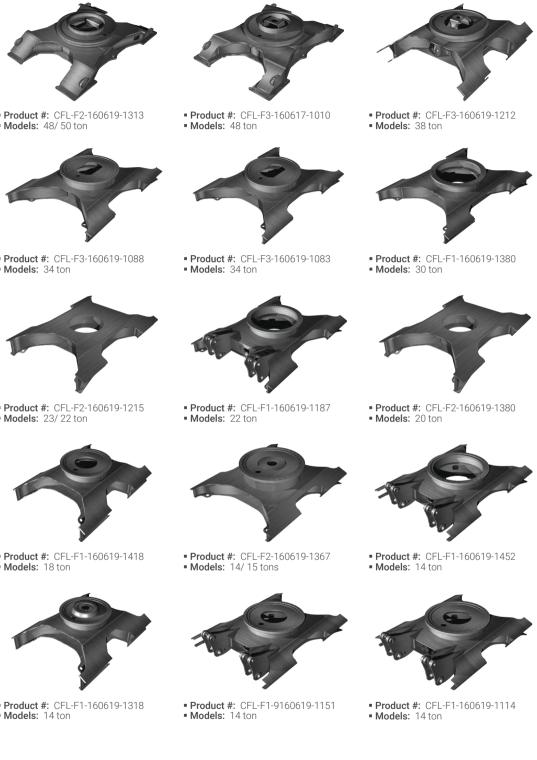


• Product #: CFL-F2-160619-1089 Models: 26 ton



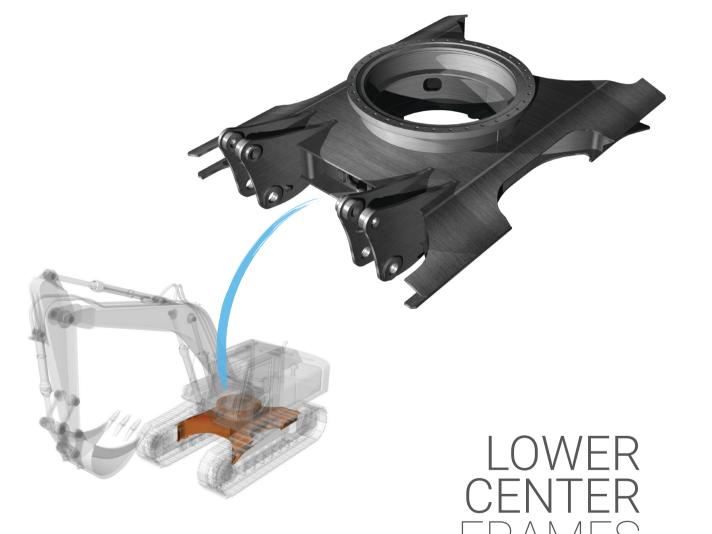


• Product #: CFL-F2-160619-1207 • Models: 18 ton

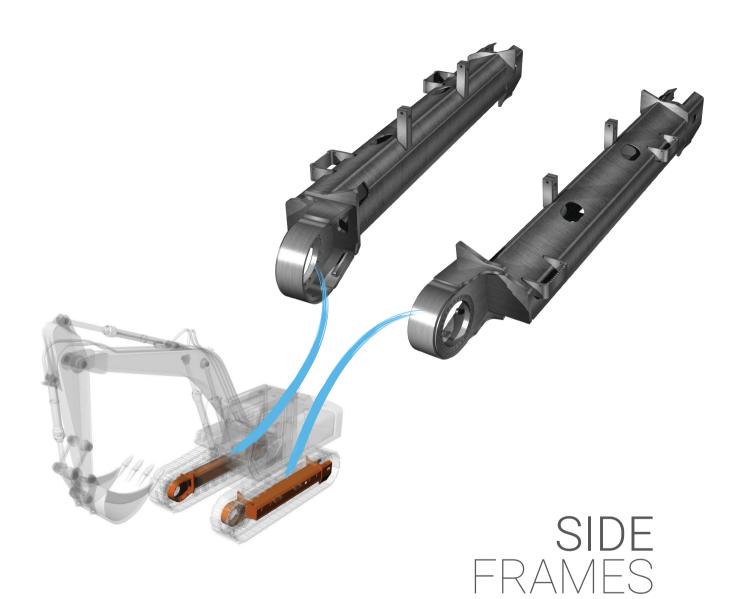




• Product #: CFL-F1-160619-1051 • Models: 14 ton



The Lower Center Frame forms the main body framework of track-type excavators and is installed at the bottom of the excavator's body. It is combined with a pair of Side Frames welded on both sides and supports the parts for driving functions and the parts for body-rotary functions. A technique that prevents deformation caused by welding is critical when manufacturing the frames to maximize the dimensional precision on locations where Side Frames and other mechanical parts are attached.



A pair of Side Frames are welded on each side of a Lower Center Frame to function as structures holding both tracks on the left and right sides. Pre-strain techniques are required upon precise analysis on the amount of deformation by welding when manufacturing these frames.







• Product #: SDF-F3-160622-1666 • Models: 42 ton

• Product #: SDF-F3-160622-1618 • Models: 42 ton



• Product #: SDF-F2-160622-1855 • Models: 42 ton





• Product #: SDF-F2-160622-1622





• Product #: SDF-F1-160622-1737

• Models: 30 ton

• Product #: SDF-F2-160622-1610 • Models: 30 ton



• Product #: SDF-F1-160622-1717 Models: 30 ton

• Product #: SDF-F1-160622-1518

• Models: 22 ton

Product #: SDF-F2-160622-1780
 Models: 25 ton



• Product #: SDF-F1-160622-1954 • Models: 22 ton



• Product #: SDF-F1-160622-1624 • Models: 18 ton



• Product #: SDF-F1-160622-1744 • Models: 14 ton

• Models: 18 ton

• Product #: SDF-F1-160622-1812 • Models: 14 ton







- Product #: SDF-F3-160622-1628
- Product #: SDF-F3-160622-1703 • Models: 34 ton



• Product #: SDF-F1-160622-1506 • Models: 30 ton



- Product #: SDF-F2-160622-1643 • Models: 25 ton
- Product #: SDF-F2-160622-1684 • Models: 20 ton



• Product #: SDF-F1-160622-1990





- Product #: SDF-F1-160622-1892 • Models: 14 ton



• Product #: SDF-F2-160622-1774 Models: 34 ton



• Product #: SDF-F1-160622-1952 Models: 30 ton



• Product #: SDF-F2-160622-1805 Models: 22 ton



• Product #: SDF-F2-160622-1649 • Models: 18 ton



• Product #: SDF-F2-160622-1657 • Models: 14 ton



• Product #: SDF-F1-160622-1528 • Models: 14 ton





Product #: TRF-FK-05610-2295
 Models: 7 ton

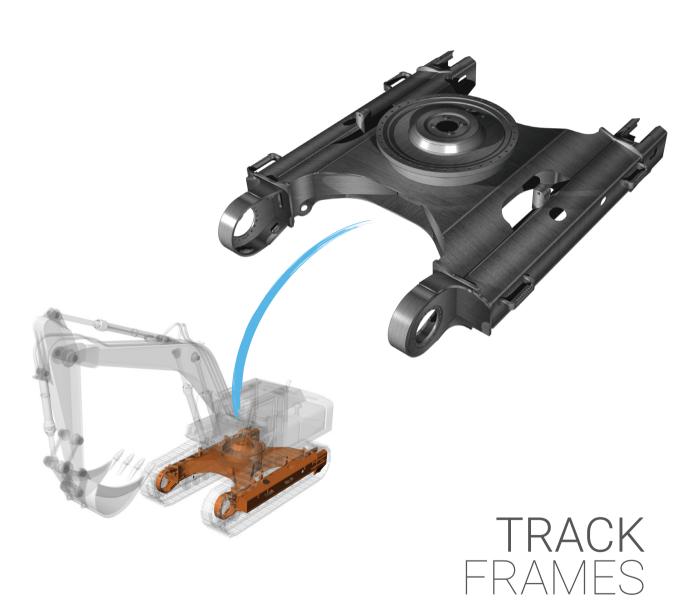






Product #: TRF-FK-2028
 Models: 6 ton





The Track Frame is the result of a Center Frame and Side Frames combined together and it serves as the primary framework of excavator body contributing to driving and rotating functions. Highly precise manufacturing and inspection techniques are required because Track Frames affect to the body balance and driving stability of excavators.



Product #: TRF-FK-2342Models: 7 ton



Product #: TRF-FK-03710-2087
 Models: 3.5 ton



Product #: TRF-FK-05510-2337
 Models: 6 ton





• Product #: MNF-FK-05730-2523 • Models: 13.5 ton

Product #: MNF-FK-05730-2898
 Models: 12.5 ton





• Models: 6 ton

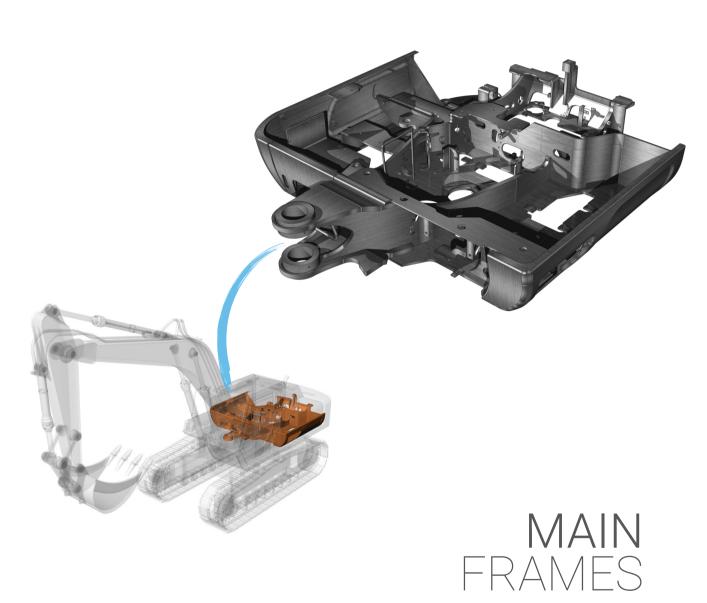
• Product #: MNF-FK-05630-2635 • Models: 7 ton



Product #: MNF-FK-03730-2713
 Models: 3.5 ton



Product #: MNF-FK-03730-2677
 Models: 3.5 ton



A various types of components are attached to the Main Frame such as a cabin where users of excavators sit and control, an engine which provides power, a boom which performs as a cantilever arm, balance weights that provide stability, etc. Since many critical components are installed on the Main Frame, very precise manufacturing techniques are required to minimize the dimensional tolerances and heat deformations.





• Product #: MNF-FK-05630-2751 • Models: 7 ton





• Product #: MNF-FK-160620-2849

Product #: MNF-FK-05530-2775
 Models: 6.5 ton



• Product #: MNF-FK-05630-2897 Models: 7 ton



• Product #: MNF-FK-03930-2620 Models: 5 ton

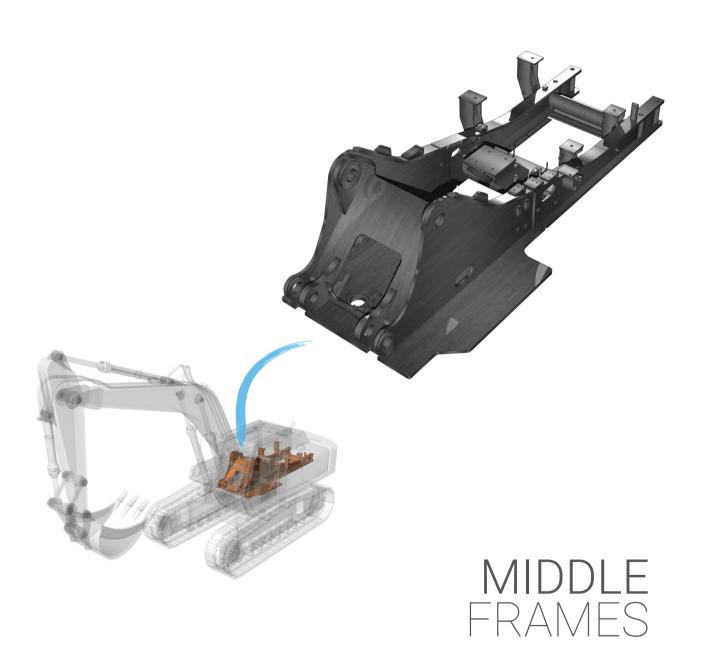






Product #: MDF-F3-160621-3347
 Models: 34 ton

Product #: MDF-F1-160621-3247Models: 22 ton



The Middle Frame is connected to a Center Frame or Chassis Frame with being attached with many types of components such as a cabin, an engine, balance weights and varied electronics. Since many critical components are installed on the Middle Frame, very precise manufacturing techniques are required to minimize the dimensional tolerances and heat deformations. Also, an extra quality maintenance is mandatory for the front side is being exposed to the outside.







• Product #: MDF-F1-160621-3019 • Models: 22 ton

Product #: MDF-F1-160621-3152Models: 22 ton





• Product #: CHF-F1-160611-3680 Models: 21 ton





• Models: 16 ton

• Models: 14 ton



• Product #: CHF-F1-160611-3923 • Product #: CHF-F1-160611-3969 Models: 16 ton

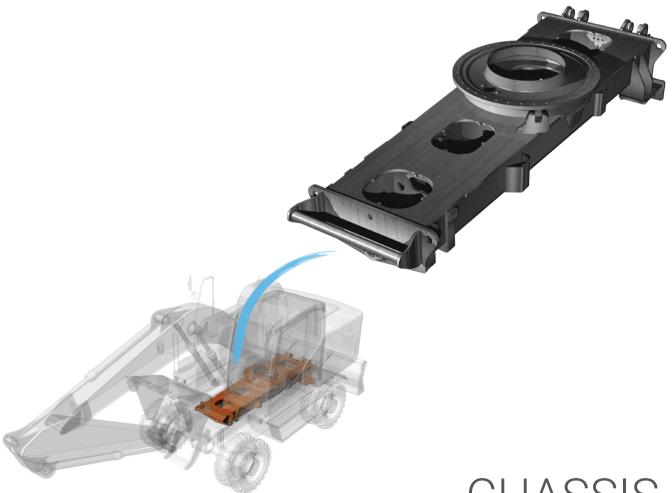


• Product #: CHF-F1-160611-3920

Product #: CHF-F1-160611-3830
 Models: 14 ton



- Product #: CHF-F1-160611-3932 • Models: 14 ton
- Product #: CHF-FK-05610-3619 • Models: 7 ton





The Chassis Frames are similar to Center Frames on track type excavator but installed on wheel types with a Middle Frame attached on top to form the framework of the lower body. When manufacturing, managing the balance and horizontality are very important because drive axles and tires are attached to this component. Also, high quality welding and delicate fabrications are required for many other options could be installed on.



- Product #: CHF-F1-160611-3866 Models: 19 ton



- Product #: CHF-FK-160611-3527 Models: 15 ton



- Product #: CFL-F1-160611-3902
   Models: 14 ton



• Product #: CHF-FK-160611-3967 • Models: 6 ton



• Product #: CHF-F2-160611-3795 Models: 17 ton



• Product #: CHF-F1-160611-3665 • Models: 14 ton



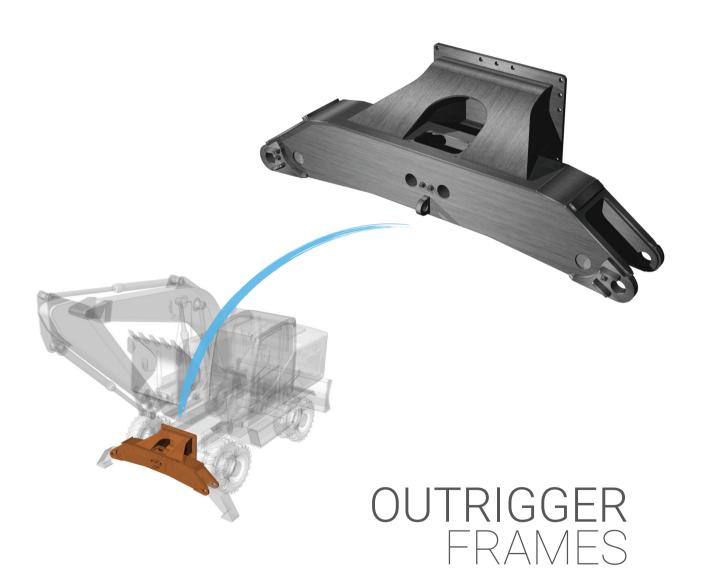
• Product #: CHF-F1-160611-3677 Models: 14 ton





Product #: ORF-F1-160624-4041
 Models: 21 ton

Product #: ORF-F1-160624-4387
 Models: 21 ton



The Outrigger Frame is an anchoring device that is attached to either the front or back side of a Chassis Frame on wheel type excavators. It promotes the stability while at work by reducing torsions and pulsating loads and requires zero defect welding performance when manufactured.





Product #: ORF-F1-160624-4362
 Models: 14 ton

Product #: CFL-F1-160624-4254
 Models: 19 ton





Product #: ARM-FK-230204-4711
 Models: 26 ton

Product #: CFL-FK-230204-4570
 Models: 22 ton





Product #: ARM-FK-230204-4985
 Models: 15 ton

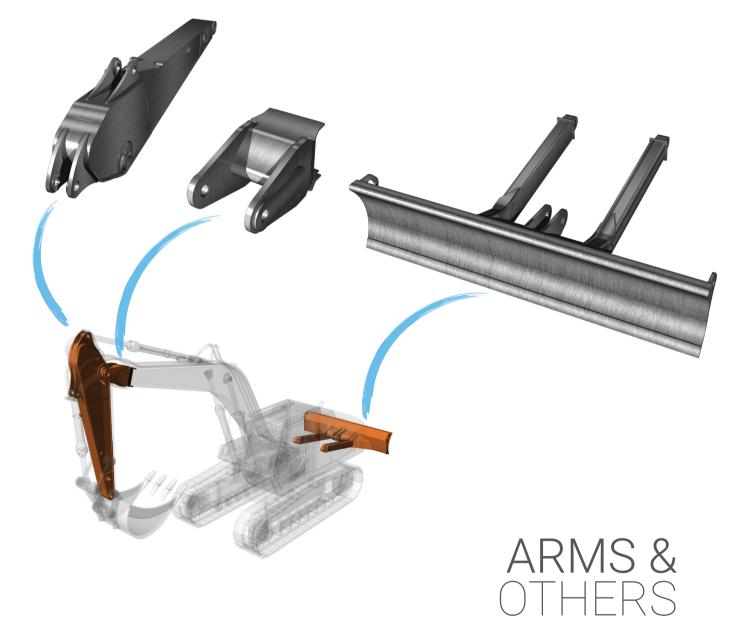
Product #: ARM-FK-230204-4798
Models: 11 ton

#### <sup>1</sup> DOZER BLADES

The Dozer Blade, attached to the back of an excavator, is a component that excavates and grades earth and other materials from the ground. Manufacturing techniques that prevents heat distortion and load distortion are required because the horizontal balance of the blade intensively affects the performance of work. Also, delivering the durability and structural strength of the component are mandatory.

#### <sup>2</sup> BOOM TOPS

The Boom Top is a structural linkage connecting the Arm to the Boom. Because the component is exposed to fatigue accumulation in proportion to the amount of work done, high structural strength should be delivered. Also, very high dimensional precision is required when manufacturing because the alignment of assembly is important for the movement of the Arm.



The Arm is a component attached between the Boom and the Bucket with providing the digging movement. Because the component is exposed to fatigue accumulation in proportion to the amount of work done, high structural strength should be delivered. Also, very high dimensional precision is required when manufacturing because the accuracy of alignment from the Boom to the Bucket is critical.



Loader & Dozer Components





Product #: TRK\_ARM-FK-06560-5434
 Models: 3 ton Track loaders

Product #: TRK-BRK-FK-06561-5141
 Models: 3 ton Track loaders



Product #: BDZ-LNK-FK-14X-78-5351
Models: D65 Bulldozers

#### <sup>1</sup> LOADER ARMS

The wide bucket of track loader is put to work by being attached to the Arm component. Since accurate alignment and high durability of this component are fundamental matters for the quality of the final product, very precise manufacturing techniques and high structural strengths are required.

#### <sup>2</sup> LOADER BRACKETS

The Bracket is a linkage component which allows users to attach buckets or forks to the Arm of the loader. It must be manufactured to secure and maintain the lateral balance for optimal work performance and, also, high structural strengths should be guaranteed for a good durability.

#### <sup>3</sup> LOADER MAIN FRAMES

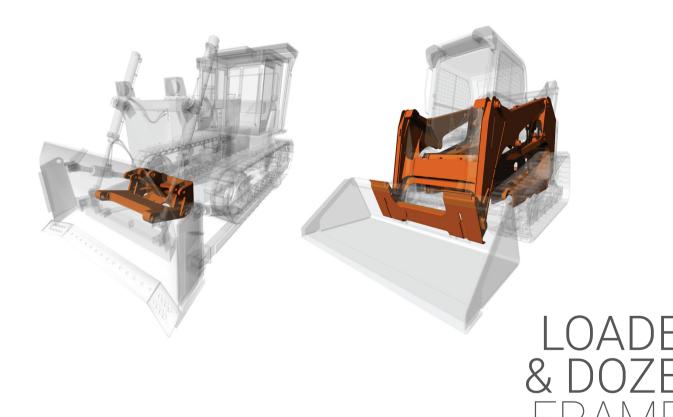
The Main Frame is the main body of a track loader and all functions and options are set up on this component. Delivering good strength and stability is very important because it affects to the balanced drivability while carrying all the parts and components of the loader. When manufactured, quality management on the precision of dimensional tolerances and prevention of deformations is required.

#### <sup>4</sup> DOZER SUPPORTERS

The Supporter is attached to the front or back of a bulldozer to connect the Link component to the main body. This component literally supports the movements of blade or fork attachments and it should be manufactured to deliver the high structural strengths for a good durability.

#### <sup>5</sup> DOZER LINKS

The Link is a linkage component attached to the front or back of a bulldozer. It allows users to attach blades or forks to the Supporter component. It must be manufactured to secure and maintain the lateral balance for optimal work performance and, also, high structural strengths should be guaranteed for a good durability.



Currently we are making Main Frames, Arms & Brackets for track loaders and Supporters & Links for Bulldozers.



Product #: BDZ-SPT-FK-14X-78-5143
 Models: D65 Bulldozers

Product #: TRK-MNF-FK-06530-5013
 Models: 3 ton Track loaders

Turbo Compressors





Product #: SM Series (Packaged)
 Models: 3000/ 4000/ 5000/ 6000

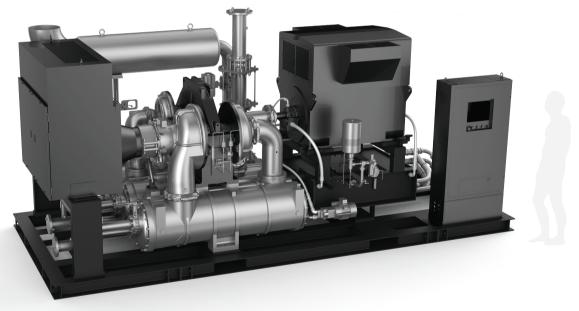
Product #: SM Series (Standard)
 Models: 3000/ 4000/ 5000/ 6000

### <sup>1</sup> SM Series (Packaged & Standard)

	SM3000	SM4000	SM5000
Flow Rate (CFM)	1,950~3,100	3,100~4,950	4,950~8,850
POWER (HP)	282~913	410~1,350	660~1,800

# <sup>2</sup> SM100 Series (Packaged & Standard)

	SM3100	SM4100	SM5100	SM6100	SM7100
Flow Rate (CFM)	1,950~3,100	3,100~4,950	4,950~8,850	8,850~12,400	14,400~18,800
POWER (HP)	282~913	410~1,350	660~1,800	1,050~3,150	1,340~4,155



Turbo Compressor is an industrial machinery equipment which produces an energy source for plants by compressing and conserving the air from the atmosphere. We manufacture complete products of these complex machines as an Original Equipment Manufacturer.





Product #: SM100 Series (Packaged)
 Models: 3100/ 4100/ 5100/ 6100



Product #: SM100 Series (Standard)
 Models: 3100/ 4100/ 5100/ 6100/ 7100

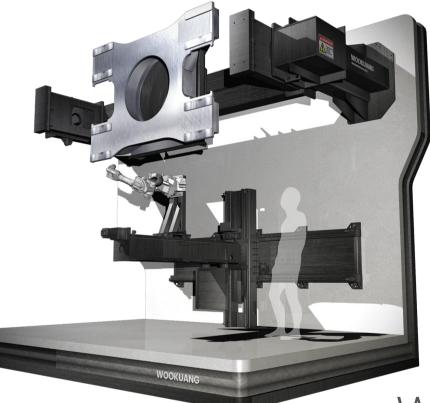
#### SM6000

8,850~12,400

1,050~3,150

Appendix: Current Products (Robotic Equipment)

Robotic Equipment

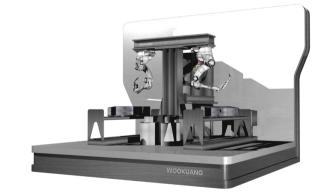


# WELDING R(

Turbo WOOKUANG is independently making robotic equipment that executes automatic welding tasks on heavy steel components. Our products are precise, efficient, durable and completely customizable by client demands. Users can expect endless production of their products with a consistent quality and cost efficiency. We perform entire process of the equipment production from design & manufacturing to installations & services.

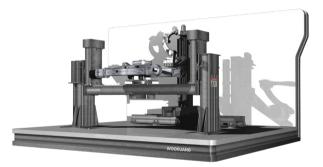


Purpose: Welding Center Frames
 Models: 2 Prototype Modules



Purpose: Welding Side Frames
 Models: 1 Prototype Module

\* More information is available upon request.



- Purpose: Welding Track Frames
   Models: 2 Prototype Modules



Purpose: Welding small parts
 Models: 2 Prototype Modules