

**SARAY®**

all about **aluminium**



With more than 40 years of experience, SARAY Aluminum provides aluminum profile production to its customers in the industrial field with its integrated production lines.

**INDUSTRIAL PROFILES**

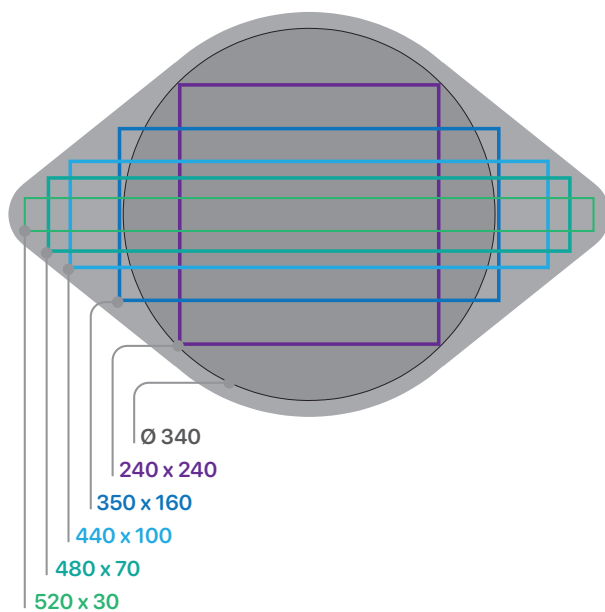
# Aluminium Profile Extrusion 80.000 Tons/Year



## Extrusion

Extrusion is the process of obtaining the profile that has the shape of the die by passing the aluminum heated billet about 420-520°C through steel molds with a high force provided by the press.

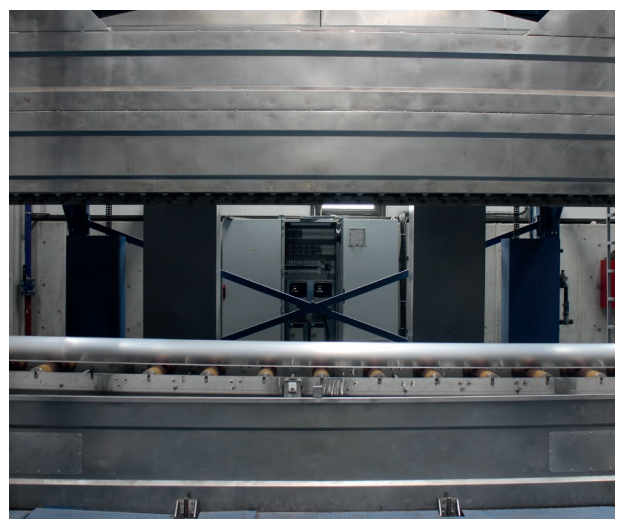
There are 9 press lines which are 1600, 2000, 2800 and 4500 tons in our extrusion facility. In our production we use primary billets with 1xxx, 5xxx, 6xxx series alloys and aluminum profiles up to 14 meters can be produced. We have more than 20.000 extrusion dies and 80.000 tons of profiles are produced annually.



Alloys	Billet Diameter (inch)
1XXX 2XXX 3XXX 5XXX 6XXX 7XXX 8XXX	6" / 7" / 9" / 10" / 12"
Extrusion Press (Tonnes)	Billet Diameter (mm)
3 x 1600	152
3 x 2000	178
1 x 2800	228
1 x 4500	304 / 254

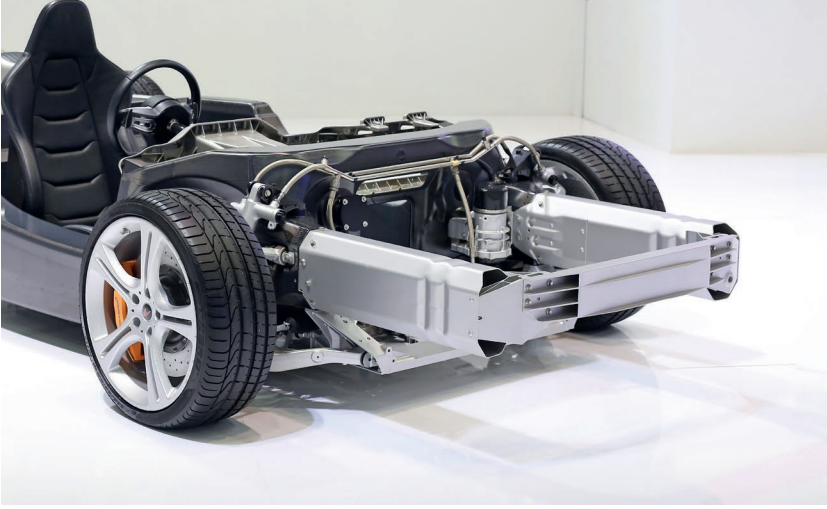
## 4500 MTON Press with Quenching Technology

Profiles which will be produced with 10" and 12" billets can be produced with 45 MN extrusion press line, meet the needs of different industrial sectors such as HVAC, Automotive and Automotive supply, Defense, Aviation, Railway, heat-sink, lighting, scaffolding, hydraulic gear pump, machine construction, shipyard and shipyard equipment industries which we are able to supply in short terms. Induction heating technology is used on billets for optimum conical heating. According to the needs of the customers, we are able to apply water or water spray cooling Quenching technology which offers the opportunity to produce aluminum profiles in the desired hardness condition in our 45 MN production line. With this investment, SARAY's production capacity has been expanded to 80.000 tons/year, offering numerous benefits to its customers and further strengthening its position in the market.





## IATF 16949 Automotive Quality Management System Certificate



### IATF 16949

This prestigious certificate, which is a requirement for all companies operating in the automotive sector and supplying products to the industry, highlights our commitment to the highest quality standards in the automotive industry at Saray.

As one of Turkey's longstanding industrial establishments, we aim to meet the aluminum product demands of the automotive sector at the highest level.



## Aluminium Billet Casting 150.000 Tons/Year



### Cast House

Our casting house, which has a closed area of 10.000 m<sup>2</sup>, consisting of 5 melting furnaces, state of the art homogenization furnace and cooling cabinets, has an annual production capacity of 150.000 tons of billets. Our capability is for 6", 7", 9", 10" and 12" diameters, the billets are up to 8.000 mm length and are suitable for standard alloys (1050, 1350, 6005, 6005A, 6060, 6061, 6063, 6082 and 6463). We are also able to produced special alloys according to the customer's demands. Samples will be taken before and after casting and spectral controls, shell zone thickness measurement, microstructure control, segregation and grain boundary analyzes are performed after homogenization.



## Mechanical Process

High-tech machinery in our production line offers cutting, drilling, milling etc. in precise tolerances with our professional technical team. We provide high-quality service to our customers during the assembly phase by supplying the most performing system accessories. Our aim is to help customer's projects by offering the most efficient and cost-effective solutions with our experience and high-tech machinery.

- 5 Axis CNC Profile Machining Center (x:14.000 mm): 1 unit
- 3 Axis CNC Double Table Tapping Center (x:750 mm): 1 unit
- Double Head Cutting Machine: 4 units
- Profile Slicing Machine: 2 units
- Radial Drilling: 2 units
- Drying Machine: 1 unit
- Threading Machine: 3 units
- Thermal-Barrier Crimping Machine: 3 units
- Wick Crimping Machine: 3 units

## High-Tech CNC Mechanical Treatment Lines



## More than 20.000 extrusion die archive



**Die House**

Saray Aluminum produces high quality dies more than 40 years' experience, provides high quality standards, and constantly improves its performance criteria and technology. Our die house department, which has an archive of more than 20,000 dies, can produce 3,000 sets of die per year with its state-of-the-art bench park consisting of CNC and wire erosion, its expert technical staff and special software it has developed.





## Anodizing

Anodizing, which is one of the most durable coating techniques, gives aluminum surfaces resistance to scratches and corrosion, while giving an aesthetic appearance. In our facility, profiles between 2.000 mm and 8.000 mm can be anodized with optional colors which are offered in addition to standard colors. All profiles are anodized and checked in accordance with the highest international standards. Our facility, which guarantees lifetime UV and color resistance with Qualanod and TSE standards, with a capacity of 24.000 tons per year.

**Aluminum Anodizing  
24.000 Tons/Year**



## Electrostatic Powder Coating

Our state of the art electrostatic powder coating with 13 meter horizontal painting line (1 unit), vertical painting line (1unit) and other horizontal lines ( 2 units), which are registered with the Qualicoat certificate, also produces special color profiles requested in addition to RAL colors that offer a wide range. Our Electrostatic powder coating facility, which produces high quality profiles that provide high resistance against the UV effect of sun rays and corrosion, has an annual capacity of 50.000 tons. We prioritize the sensitivity we give to the environment by choosing the world's leading paint powder brands that do not contain organic solvents and the 'Chrome Free' process.

**State of the art 13 meter  
electrostatic powder coating line**

since

1980

[www.saray.com](http://www.saray.com)

EN



**INDUSTRIAL**

Industrial Profiles

Copyright: SARAY BLC.v2.1 | 07.2024

SARAY DÖKÜM ve MADENİ AKSAM SAN. TUR. A.Ş.