

# SV 5 TP

## Vinç 5 Ton Single Crane Pro

*Efficiency Meets Strength – Lift with Confidence!*



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# Introduction

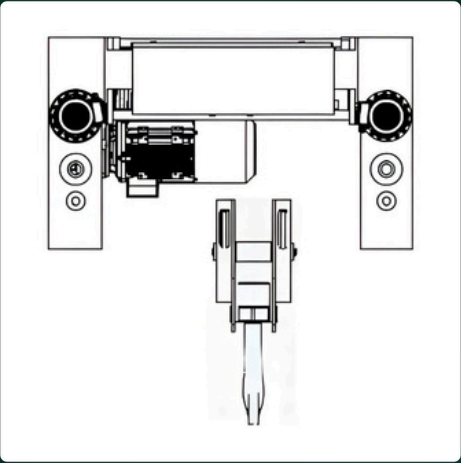
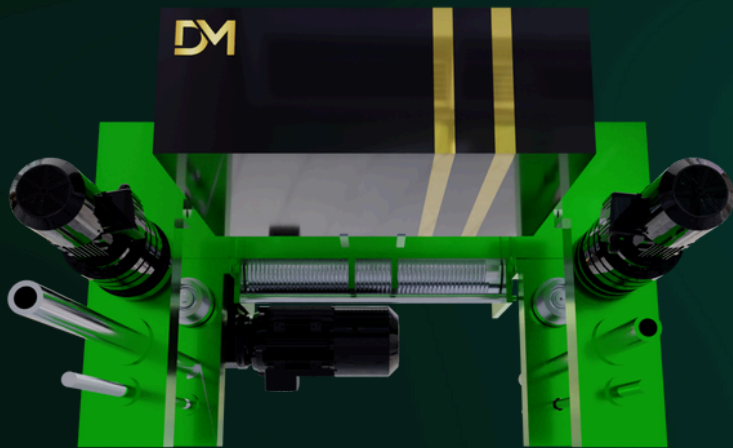
Single girder travelling cranes are cranes that are generally used in heavy load lifting and transporting works. These cranes offer special design possibilities according to the needs of the customer and the place of use. They are generally used in rolling mills, iron and steel industry, domestic warehouses, construction industry, shipyards and harbours<sup>1</sup>.

Single girder overhead cranes can be reinforced with lowered suspension system and crane rails with scissor connection and can have higher load capacity. Depending on the degree of axial opening, welded profile beams or box beams are used. These cranes are considered to be cheaper than double span bridges. Of course, the maximum load does not exceed 10 tonnes. It is also used in places with low ceilings and narrow front view. It can be used manually or using remote control





# General dimensions

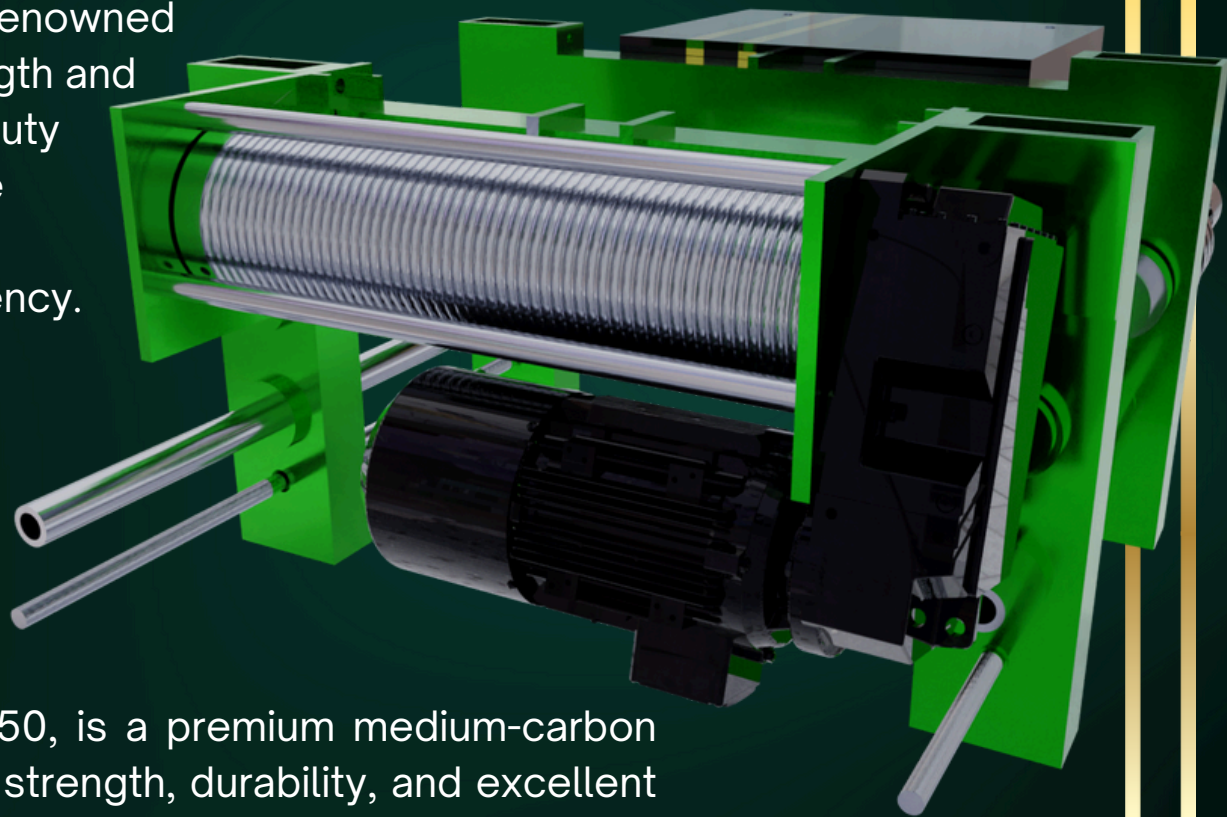


KAPASİTE (TON) CAPACITY (TON)	TİP TYPE	YÜKSEKLİK (M) LIFTING HEIGHT	KALDIRMA / LIFTING							YÜRÜTME / TRAVERSING			
			KALDIRMA HIZI (M/DK) LIFTING SPEED	KALDIRMA MOTORU (KW) LIFTING MOTOR	MOTOR DEVRİ MOTOR RPM	TAMBUR ÇAPI (MM) DRUM DIAMETER	DONANIM ROPE FALLS	HALAT ÇAPI (MM) ROPE DIAMETER	KANCA TİPİ HOOK TYPE	ARABA YÜRÜTME HIZI (M/DK) TRAVERSING SPEED	YÜRÜTME MOTORU (KW) TRAVERSING MOTOR	MOTOR DEVRİ MOTORRPM	TEKER ÇAPI (MM) WHEEL DIAMETER
1	SV1TP	9	6	1,1	1440	160	1/2	8	Nr 1	16	0,25	1425	90
2	SV2TP	9	6	2,2	1145	160	1/2	10	Nr 1,6	16	0,25	1425	90
3,2	SV3TP	9	6	3	1440	220	1/2	12	Nr 1,6	16	2*0,25	1425	125
5	SV5TP	9	4	4	1450	220	1/4	12	Nr 2,5	16	2*0,37	1440	125
6,3	SV6TP	9	4	5,5	1450	220	1/4	12	Nr 2,5	16	2*0,37	1440	125
7,5	SV7TP	9	4	5,5	1455	275	1/4	12	Nr 4	16	2*0,37	1440	140
8	SV8TP	9	4	5,5	1455	275	1/4	12	Nr 4	16	2*0,37	1440	140
10	SV10TP	9	4	7,5	1460	275	1/4	14	Nr 6	16	2*0,55	1440	140
12	SV12TP	9	4	7,5	1460	275	1/4	14	Nr 6	16	2*0,55	1440	140



# C1050 Steel drum

The drum of the SV 5 TP is made from high-quality C1050 steel, renowned for its exceptional tensile strength and durability. Designed for heavy-duty applications, it provides reliable performance and resistance to wear, ensuring long-term efficiency.

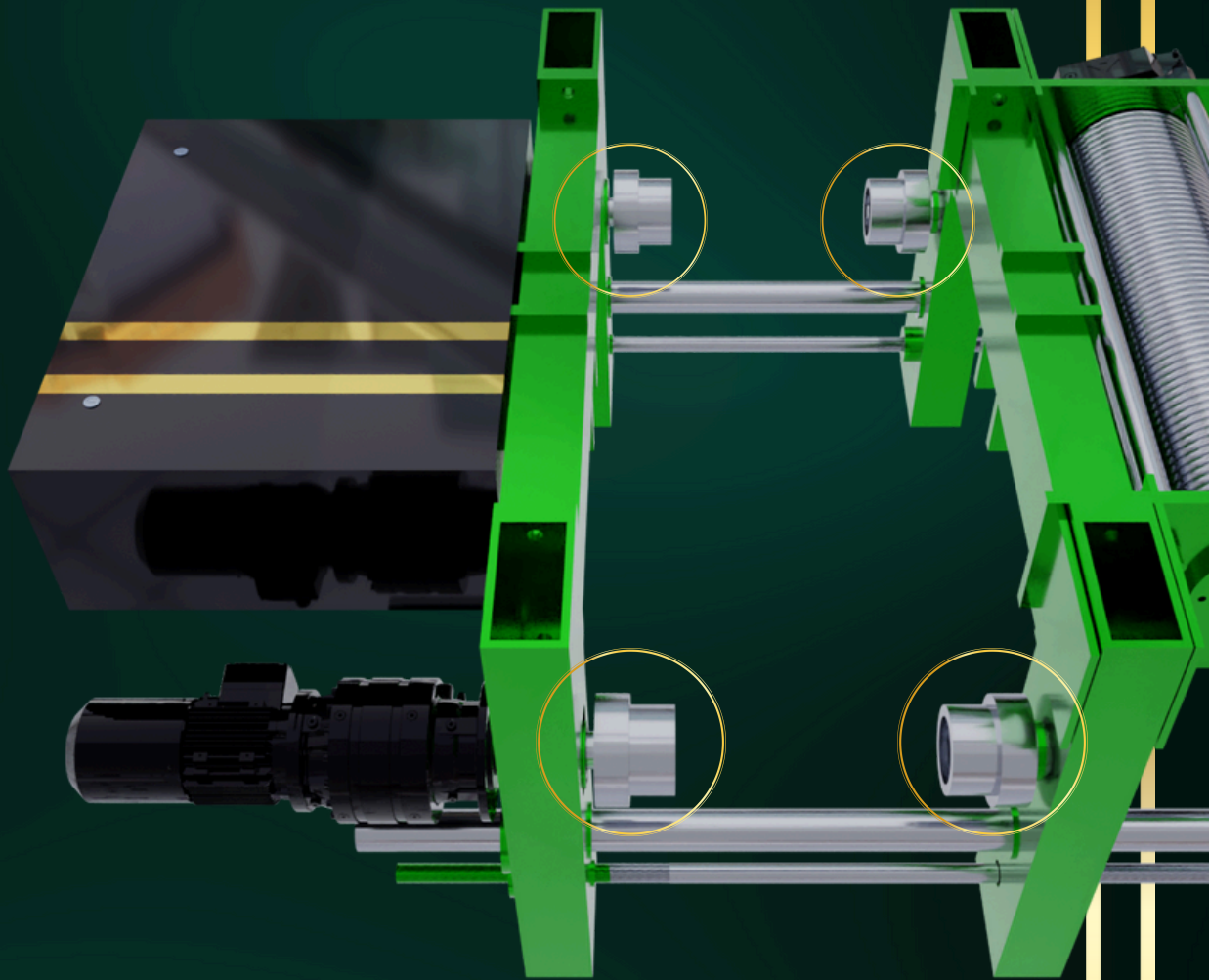


C1050 steel, also known as C50, is a premium medium-carbon steel known for its high tensile strength, durability, and excellent machinability. These properties make it an ideal choice for drum applications, where resistance to wear and heavy loads is critical. Its ability to endure constant rotation, high pressures, and surface hardening ensures reliable performance and long-lasting durability, perfectly suiting the demanding operational needs of our double girder crane.

# AISI C45 Steel wheels

The wheels of the SV 5 TP are made from AISI C45 steel, a high-quality medium-carbon steel known for its strength and reliability in heavy-duty applications.

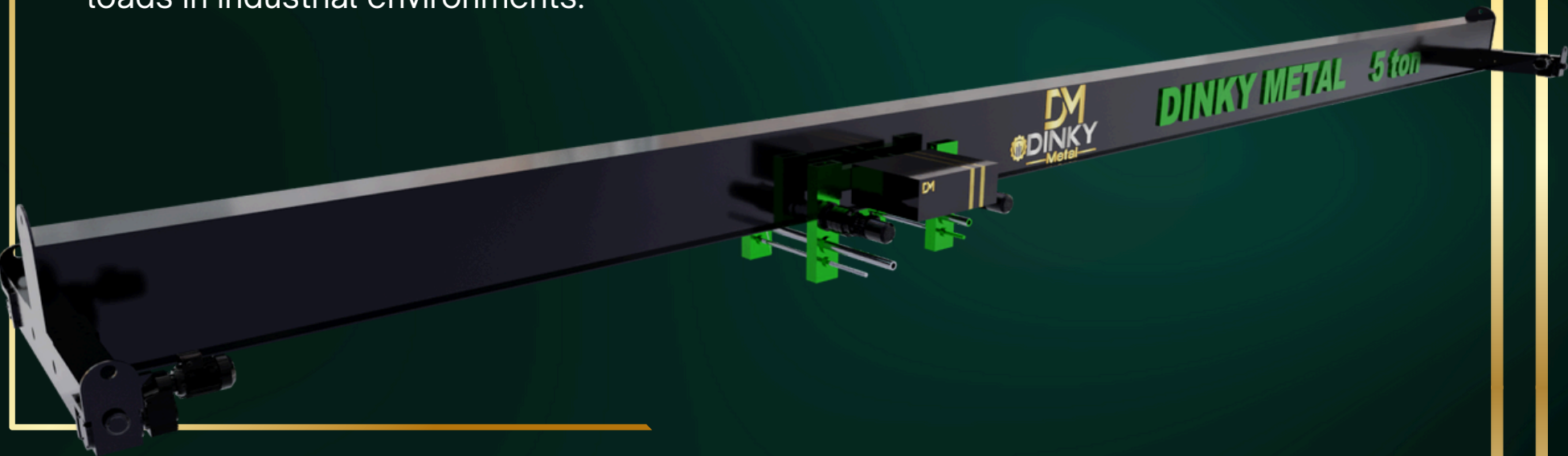
AISI C45 is the perfect choice for crane wheels due to its excellent wear resistance, high tensile strength, and ability to withstand heavy loads. Its machinability ensures precise manufacturing, while its surface hardening capability enhances durability against continuous rolling and abrasion. This makes it ideal for ensuring long-lasting, dependable performance in demanding crane operations.





# S355JR Steel bridge

The bridge of the SV 5 TP is made from S355JR Steel, ensuring exceptional durability and strength to support heavy loads in industrial environments.



Steel S355JR steel is used in the foundation and load-bearing elements of large structures such as bridges, skyscrapers, and stadiums. It is preferred for various structural components in industrial buildings, factory facilities, warehouse structures, and industrial plants.

## Mechanical Properties of S355JR Steel

**Tensile Strength:** This refers to the maximum stress level that the steel material can withstand before breaking. The tensile strength of S355JR steel, ranging between 490-630 MPa, provides high durability and safety in various applications.

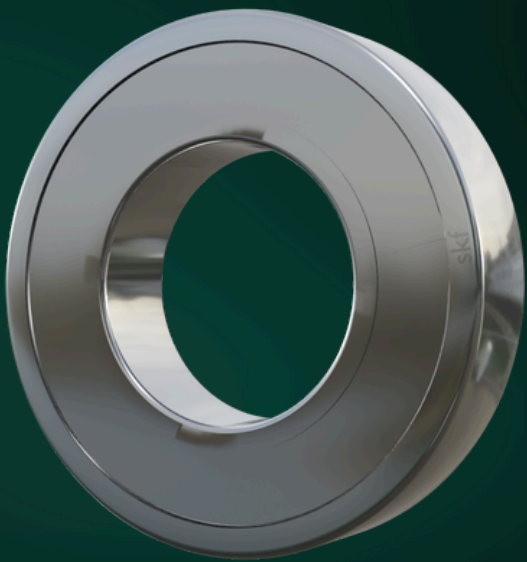
**Elastic Modulus (Young's Modulus):** This represents the material's resistance to elastic deformation. With an elastic modulus of approximately 210 GPa, it defines the steel's rigidity and resistance to deformation.

**Impact Strength:** The Charpy V-notch test evaluates how the material behaves under impact loads. In S355JR steel, a minimum impact strength of 27 Joules at room temperature demonstrates the material's resistance to impact and shock in structural applications.

# SKF 6209-C-2Z Bearing



SKF 6209-C-2Z is a single-row deep groove ball bearing designed for high-speed applications. This bearing is known for having low friction and is optimized for low noise and low vibration, which enables high rotational speeds. It accommodate radial and axial loads in both directions, is easy to mount, and require less maintenance than many other bearing types.



- Simple, versatile and robust design
- Low friction
- High-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

Inner diameter	45 mm
Outer diameter	85 mm
Width	19 mm
Dynamic Load Capacity	35.1 kN
Static Load Capacity	21.6 kN
Speed Limit	11,000 r/min
Sealed on both sides with metal shield (2Z)2	



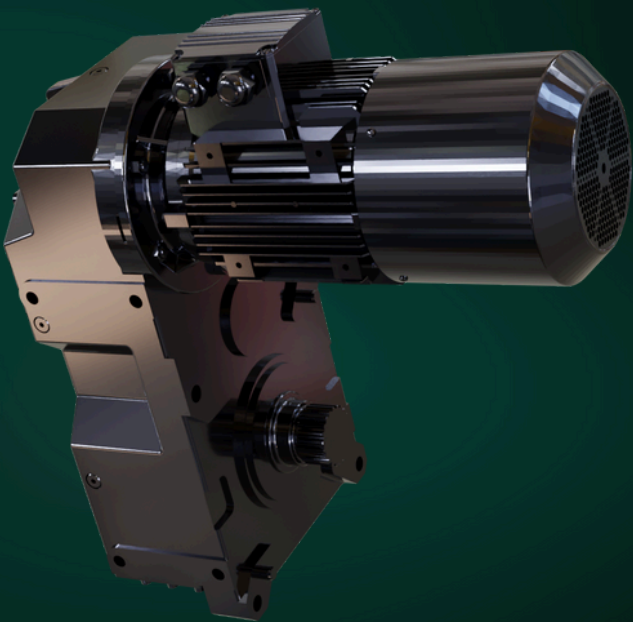
# Engine & Gearbox



The Yilmaz Gearbox VE 673 1K 3E 160 M with 11 kW power is a **robust and efficient** gearbox designed for industrial applications.

Here are some key details:

- Power: 11 kW
- Input Speed: 3,000 RPM
- Output Speed: 1,600 RPM
- Ratio: 3:1
- Torque: Suitable for high torque applications



*This gearbox is known for its durability and efficiency, making it ideal for heavy-duty machinery and equipment.*

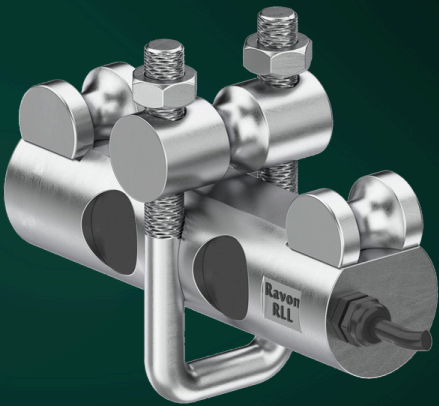
Lifting speed	9,4 m/min
Power moteur	15 kw
Out put speed abtriebs	22 n2 ( r.p.m)
Output torque abtriebs	6120 m2 Mn)
Ratio	66,59 i
Per.o.loads	110450 F/N
Weight	379 kg
Drum diameter	320mm



# RRL Load cell

Ravon

The Ravon RLL is a reliable rope clamp tension load cell that measures weights from 1 to 10 tons. Designed for easy installation with wire rope diameters of 8-36 mm, it effectively measures weight in the crane and hoist industry, enabling safe load monitoring.



Material	Steel
Load Limiting Accuracy	$\pm 1\%$
Protection Raiting	IP66
Safe Overload	$\%150\text{ FS}$
Ultimate Overload	$\%300\text{ FS}$
Cable	$4\times 0,22\text{ mm}^2$
Cable Length	2 meters
Compensated Temperature Range	$-10\sim +40\text{ }^{\circ}\text{C}$ (optional)
Operating Temperature Range	$-30\sim +70$
Rated Output	$1.2\pm 0.5\text{ mV/V}$
Recommended Excitation	3-15V
Input Resistance	$370\pm 30\text{ }\Omega$
Output Resistance	$352\pm 5\text{ }\Omega$
Zero Balance	$\pm 2\%$
Insulation Resistance	$\leq 5000\text{ M}\Omega$

# Inverter & Contactor



The Altivar inverter ATV340D15N4E ensures precise, reliable, and efficient performance in demanding applications.

## Key Features:

- **Power:** Supports 15 kW (20 hp) at 380-480 V AC, 3-phase.
- **Advanced Control:** Synchronous/asynchronous motors with vector control.
- **Fast and Connected:** 1 ms response time with Ethernet Modbus TCP/IP and EtherNet/IP.
- **Built Tough:** Works up to 60°C, IEC/EN 61800-5-1 standards.
- **Safety First:** Safe Torque Off (STO) for secure operation.



The TeSys Deca LC1D098B7 is a reliable 4-pole contactor (2 NO + 2 NC) designed for non-inductive loads up to 20 A.

## Key Features:

- **Load Capacity:** Up to 20 A at 690 V AC-1
- **Coil Voltage:** Equipped with a 24 V AC 50/60 Hz coil
- **Connection:** Features screw clamp terminals
- **Durable Design:** Complies with international standards, ensuring safety and reliability in heavy-duty use.



# Spare parts

To ensure the optimal performance and longevity of our CV 10T SH 50 crane we provide a comprehensive range of high-quality spare parts. Our spare parts guarantee seamless compatibility, durability, and reliability, minimizing downtime and maximizing efficiency for your operations.



Cable trolley



Rope trolley



Rope socket



Standar ropes

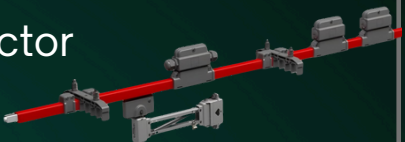
Load cell



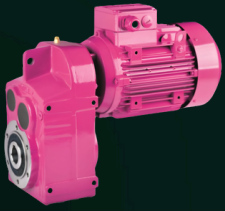
Crane hook



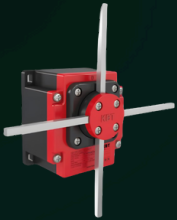
Uni-rail conductor busbar



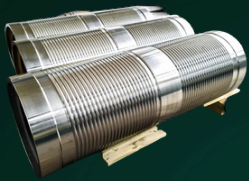
# Spare parts



Travelling gearbox

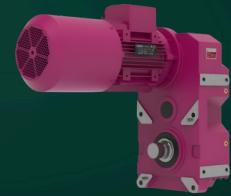


Limit switch



Drum

Gearbox



Rotray limit switches



Load display





Our branches and warehouses are strategically located across Turkey to serve our customers efficiently. Here are our locations:"

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- **Gaziantep:** Nurdağı, Yeni Mah. 1007 Sok. No: 8
- **Osmaniye:** Merkez, Mevlana Mah. 17053 Sok. No: 21, Oduncular Site

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