



PLANETARY ROLLER EXTRUDER





TAKIMSAN
DİŐLİ KESİCİ TAKIMLARI MAKİNA VE
YEDEK PARÇA SAN.TİC.LTD.ŐTİ.

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INTRODUCTION

Our company was established in 1981 and started its activities as cutting tool and gear manufacturer therewithal is supplying spare parts for many companies using planetary extruders within the plastic industry (i.e. PVC film, sheet, panel, etc.) for the last 26 years.

We believed that there was a need for planetary extruders in the Turkish plastic sector, therefore our company started to manufacture planetary extruders and as yet our TAKIMSAN-PLATEX brand has proved its quality both locally and internationally.

The very efficient Planetary Extruders on PVC achieved a great success the pellets (granulated raw material) production. The biggest advantage of the Planetary Extruders is to ensure excellent plastification and homogeneous mixing of raw materials thereby eliminating all the eventual problems i.e. degassing during further processing and extrusions.

We complete the entire mechanical parts production and electronic assembly of the extruders at our factory where we also manufacture complete planetary gearboxes. The planetary gearboxes produced by our company assure substantial electric power savings and higher power transfer ratio compared to other traditional gearbox designs.

Based on the demands of our customers and the R&D works we carry out, our Planetary Extruders guarantee the highest quality production of granules (pellets) with high production capacity for different materials such as rigid PVC, soft PVC, Wood Plastic, Bio Plastic , Recycle Rubber, PE+CaCO, etc. Platex Extruders consist of 2 stage extrusion zones and by using the necessary tools (i.e. mould, cylinder lines, etc.) can also produce Hoses, Films, Window Gaskets, Profiles, Tubes, Furniture Edge Tapes, Plastic Veneers, etc. Our company is always open to all kind of Test and R&D works with our customers' collaboration. **We are expanding the Platex Extruder's sale to customers in 5 continents.**





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QUALITY POLICY

Takimsan has been carrying out its design and manufacturing activities with its experienced team members following modern technologies.

Our dedicated employees work with team spirit. The guarantee of our quality's consistency is our accurate work, the provided product and service.

Our most important goal is achieve customer-satisfaction by continuous improvement and product development. Our quality policy is to implement the requirements of the ISO9001:2008 Quality Management System and to manage our company based on it.



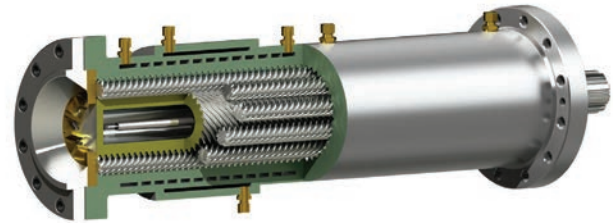
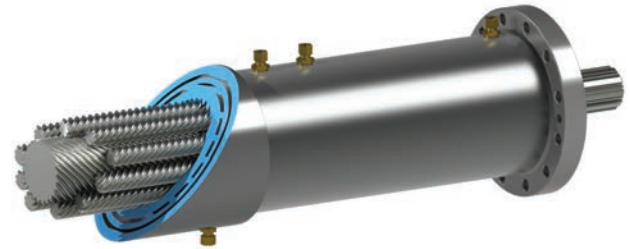
PLANETARY SYSTEM DESCRIPTION

Planetary Group is the core of the Planet Extruders and basically consists of a planet barrel, a main spindle (the sun) and several satellite spindles (screws) which rotate together in harmony.

The inner surface of the barrel and the outer surfaces of the satellite and sun screws are formed of 45 degree helix thread. The planetary group made of special steel materials hardened by special methods becomes more resistant against corrosion and wear.

Planetary extruder system compared to other extruder systems provides a better plastification thanks to the homogeneous and very efficient raw material mixing action. It can finish the processing on very short distance

Having a compact design, the planetary group in our Planet Extruder provides easy and comfortable dismantling and cleaning for its operators. Due to the design of the Planetary Screws, the Planetary System has its own self-cleaning feature. The designed screw inside the barrel is continuously pushing the whole raw material forward; therefore no left-over product will remain in the Planetary Group. This provides a great convenience, especially for those users who are working with multiple colours.



ADVANTAGES

If Your plastic products' quality is matter, PLATEX Planet Extruder is the right solution.

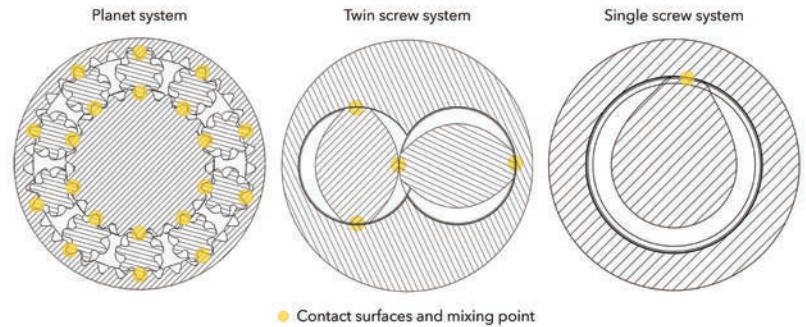
The best plastification, granulation and extrusion technology at your service .

- **Optimum degassing** in special Degassing Chamber
 - Higher clarity
 - Lower haze
 - Longer runs before cleaning
- **High production capacity**
 - From 50 kg/hr to 2000 kg/hr
- Unique desing with very efficient planetary gearboxes ensures substantial **electric power savings**

Example: For granulating plasticized PVC at 500 kg/hr - apx consumption 40 kw/hr
- Unique gear design ensure **Self-cleaning**
 - Reduced downtime, makes short formula changing time and color changing
- **Low Cost** Products because of formulations short duration inside of the extruder with less stabilizer and lubricants.
- Competitive products ensuring your **market expansion**
- **Compact design, smaller footprint**
- **Lower capital cost equipment with our competitive prices.**

- **High quality mixing and compounding**

- More contact surface areas on very short distance;



Example:

With simple cylinder calculation, Mod:3 Dia.165mm L:1000 mm 10 spindles (satellites), 50 rpm planetary group has apx. **352 m².*min** contact surface area,

In order to obtain the same or similar surface area; Dia.140mm twin screws should be at least **4 mt.** Dia.165mm single screw should be at least **14 mt**

- Because of roller design, Planetary extruder can make **gentle and efficient** processing without stagnation and stress. You can **processes all regrind** material without any problem.
- Unique design of Planetary extruder ensures processing with **lower temperatures** and compact design ensures **less temperature** exposing for **less thermal damage** to material,
- Max. filler adding possibilities , Up to 400 PHR filler mixing capabilities.
- Easily changeable number of satellites creates different mixing variations, wider processing window, accommodates variety of formulations.

FEEDING FUNNEL

This part is used optionally in the Planetary Extruder. It is generally used to convey the raw material with less fluidity, viscosity and density by the help of a feeding screw.

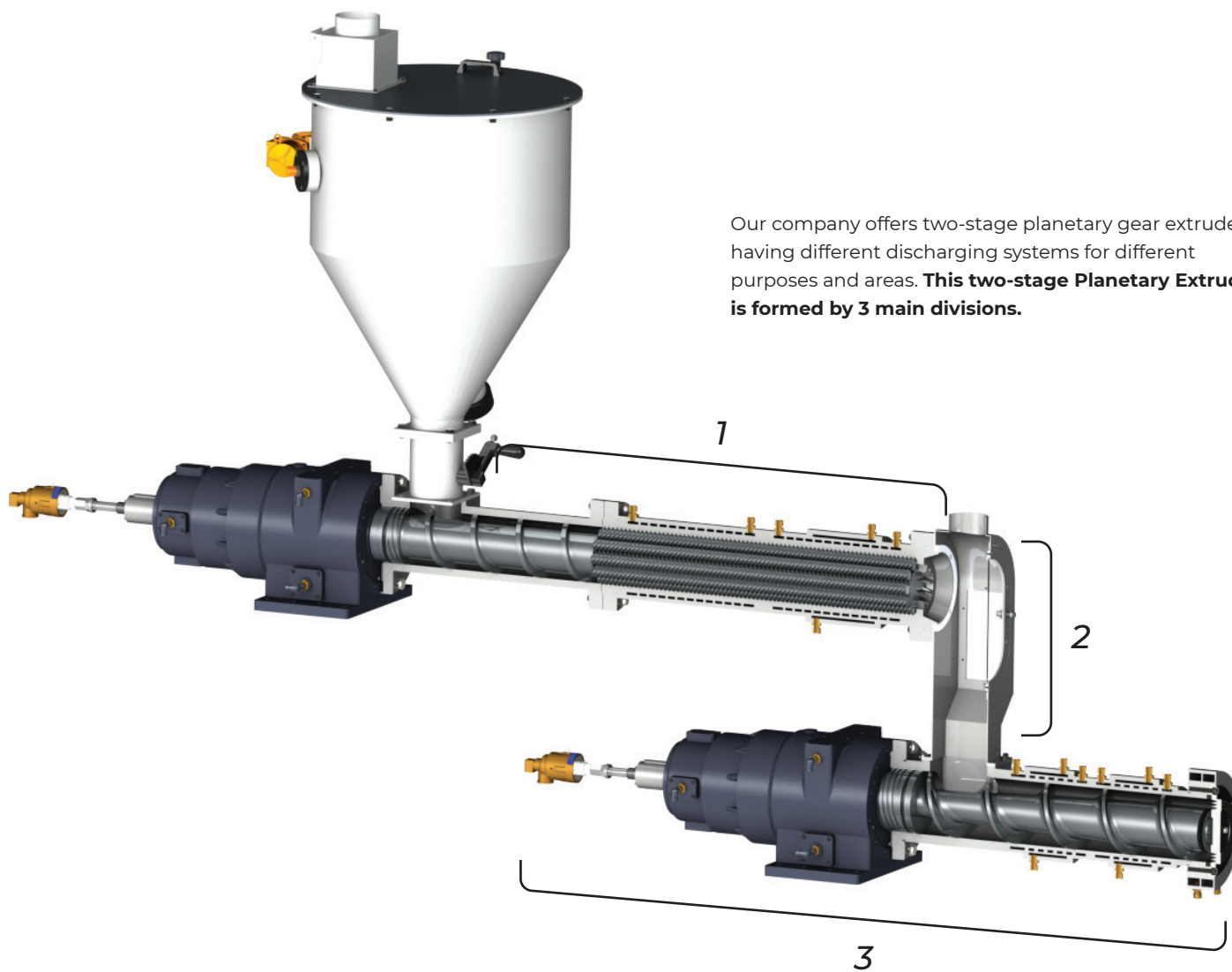
The raw material flow is continuously provided at a constant rate by optional spiral screw and mixer arms in the stainless steel funnel.

Additionally vibro motor can help the materials level inside the funnel for stable flow.

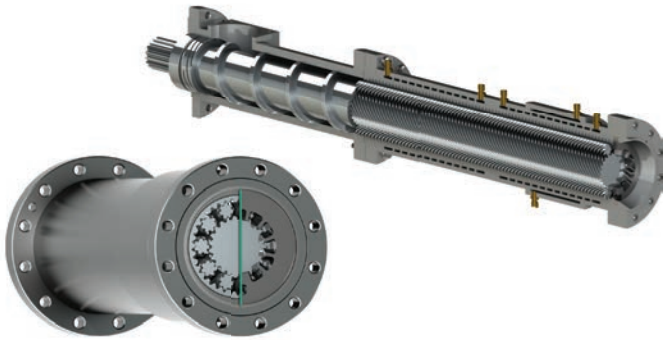


PLANET EXTRUDER DIVISIONS

Our company offers two-stage planetary gear extruder having different discharging systems for different purposes and areas. **This two-stage Planetary Extruder is formed by 3 main divisions.**



DIVISIONS OF PLANETARY EXTRUDER



Division 1

This division has Feeding Unit, which consists of the feeding-screw and barrel, carries the raw material into the Planetary group, which makes the formulations processing.



Division 2

Vacuum-Degassing Chamber where volatile gases are removed from the Plastic Mixture to ensure better product quality.



Division 3

Discharge Unit which properly pushes out the plasticised and degassed mixture. **Either granulation head or extrusion die can be added to end.**



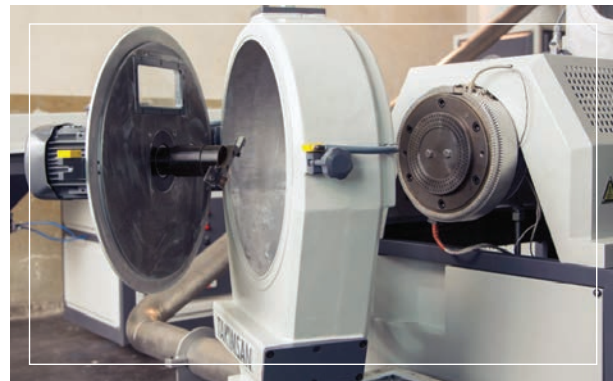
GRANULATION DIVISION

The perfectly mixed and degassed granules (pellets) produced by our Platex Extruders acquire better quality and resistance comparing to granules produced by other extruder machines.

The Planetary mixing system provides a fast transfer of the plastic mixture throughout the extruder offering an increase of production capacity.

Our granulation unit have been designed for easy assembly and dismantling, therefore cleaning can be done very easily after dismantling the 2 parts of the unit.

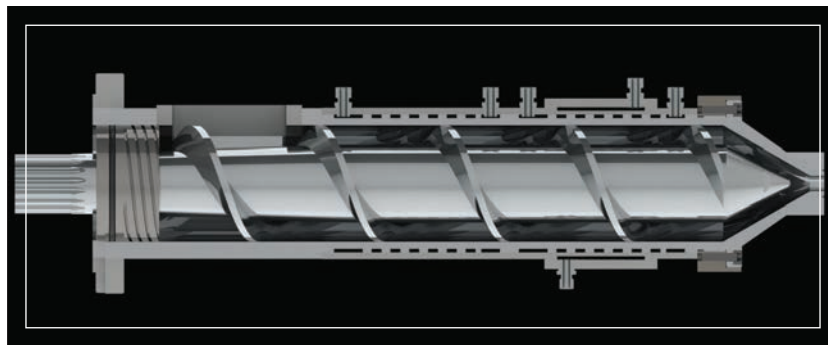
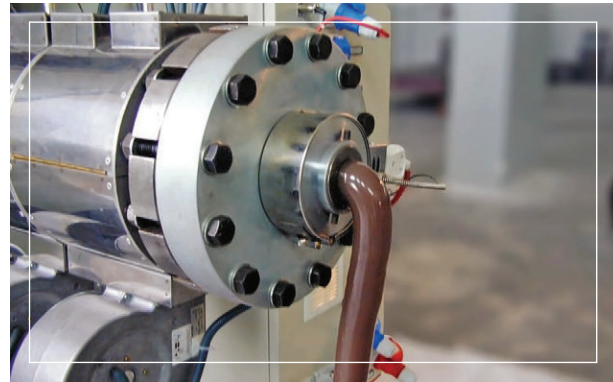
The specialized internal water cooling design helps reducing the temperatures of granules and prevents stickness.



EXTRUDER NOZZLE

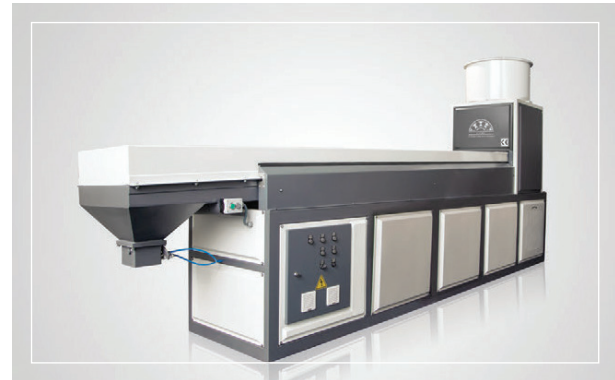
The Extruder Nozzle is connected to the output section of the Conveyor Screw and feeds the final plastic melt into the cylinder lines in order to produce products such as PVC or PE films, folios, table clothes, plastic sheets or plates, etc.

This nozzle is manufactured to withstand high pressure and temperature caused by the plastic melt passing through.



COOLING DIVISION

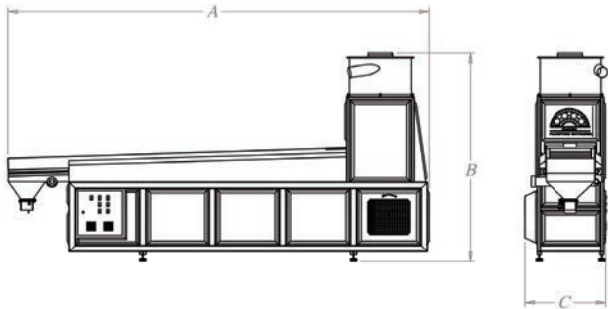
This division was developed for granule cooling and elimination. Basically the granules are pushed onto Cooling Sieve by a powerful cooling air-blower. With the help of vibro motors they move the bagging section while cooling air blown under them.



Up to 2000 kg / hour cooling capacity.



COOLING DIVISION



XEB

XEC

	XEB	XEC
A	5100 mm	5100 mm
B	2500 mm	2700 mm
C	1050 mm	1180 mm

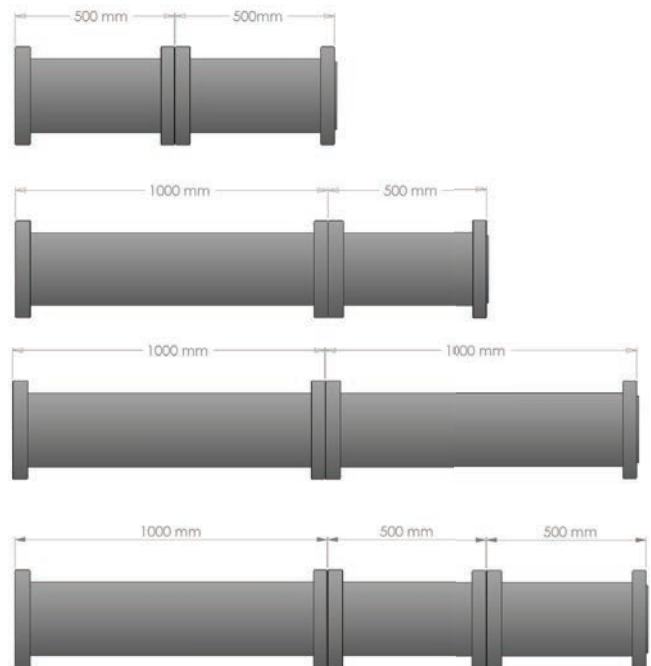
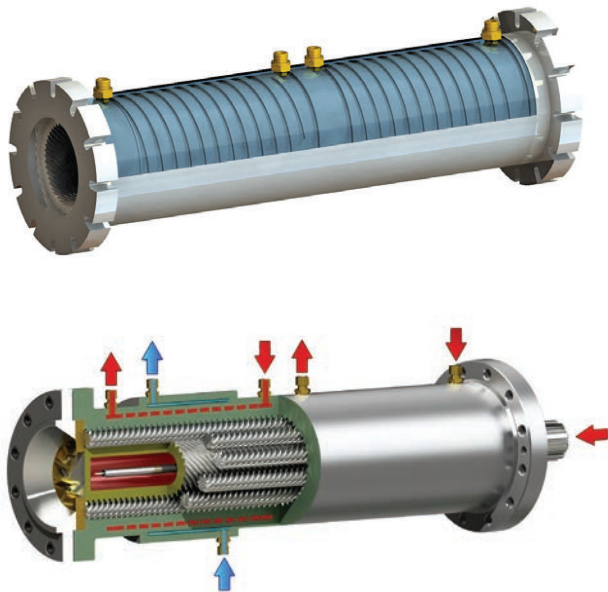


OPTIONAL PARTS

Optional Planetary Group Models

We can also manufacture the planetary groups with optional sizes and mods,

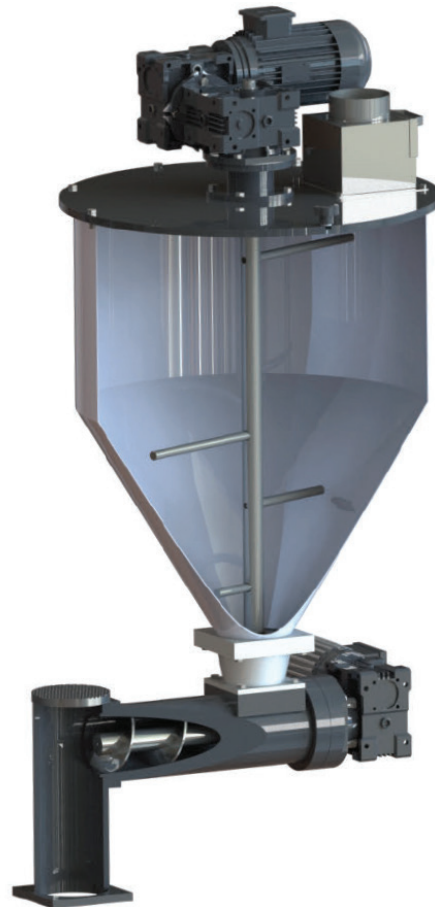
- Adding cooling and heating sections
- Smaller or longer planetary zones,
- Adding sensors and injectors ... etc.



OPTIONAL PARTS

Optional Dosing Unit

Optionally, driver controlled dosing screw and barrel can be added under the feeding funnel, which allows to control the mixtures flow speed on the PLC screen.



PLC AUTOMATION

All the electronic and mechanical equipment of our planet extruders can be controlled by the PLC control unit that we supply.

All sections of the Extruder can be controlled and adjusted easily on the touch-screen panel. PLC can be programmable with customers request,

Remote control and service access via internet is available



PLANETARY GEARBOXES

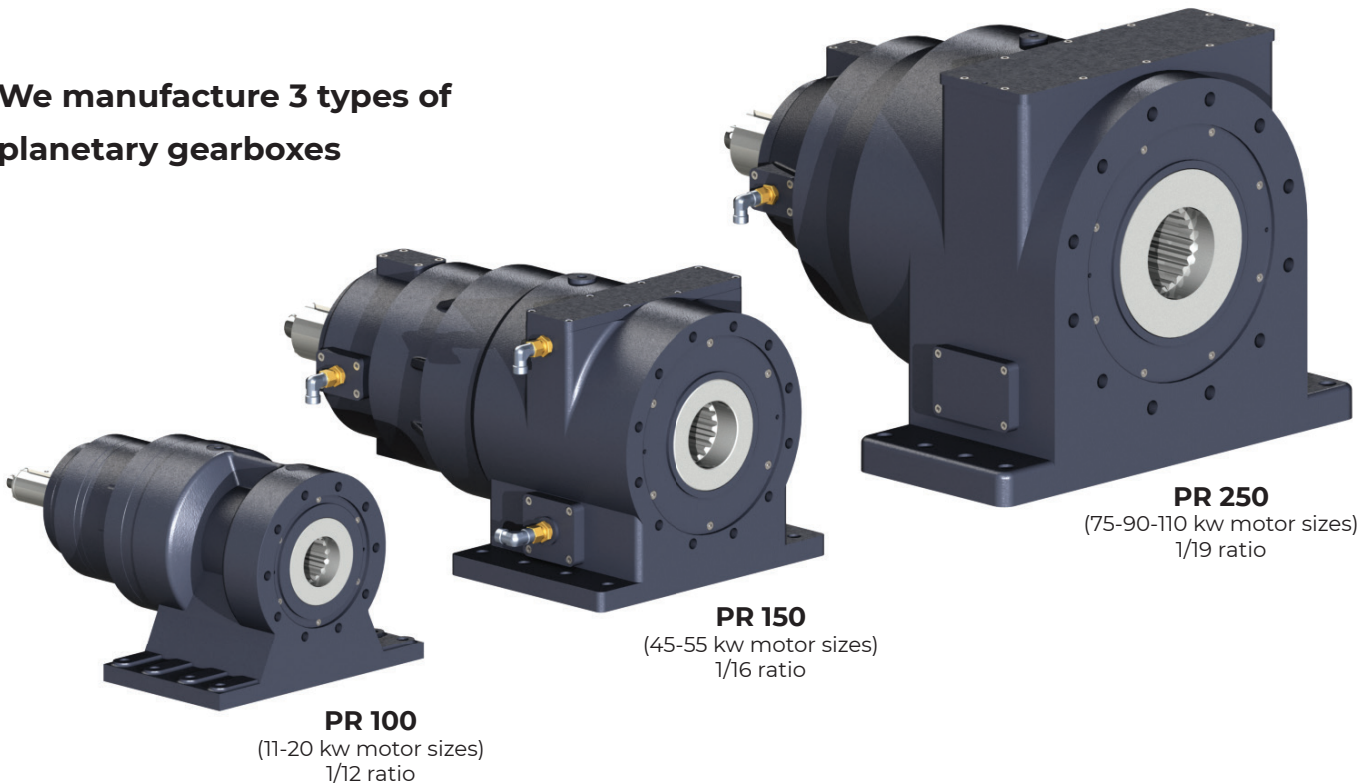
The Planetary Gearboxes we manufacture in our factory, can smoothly and most efficiently transmit the power of electric motors to the Extruder Screws.

The electric motors consume less energy and convey more power due to less mechanical loading providing, so its saves energy for users

All planet gearboxes and extruder screws are lubricated automatically and they work in harmony with each other.

Double section planetary gearboxes with 96-97% efficiency.

We manufacture 3 types of planetary gearboxes

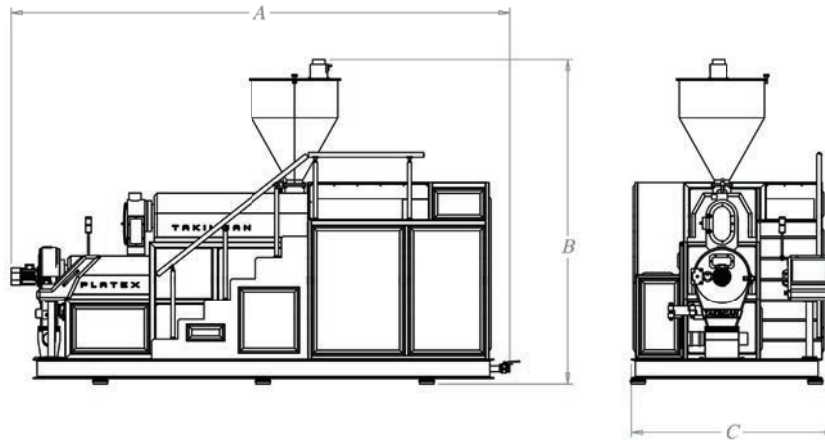


PR 100
(11-20 kw motor sizes)
1/12 ratio

PR 150
(45-55 kw motor sizes)
1/16 ratio

PR 250
(75-90-110 kw motor sizes)
1/19 ratio

PLATEX EXTRUDERS



Extruder Types	Electric Motors	C (cm)*	A (cm)*	B (cm)*	Weight(kg)*	Capacity (kg/h)**	Gearbox
PLATEX 80 (Lab Size)	4-15 kW / 4-15 kW	***	***	***	***	Max. 45	PR 100
PLATEX 100	32 kW / 15 kW	150	280	260	3200	100 - 200	PR 100
PLATEX 155	45 kW / 32 kW	210	480	380	4700	450 - 800	PR 150
PLATEX 165	55 kW / 45 kW	210	480	380	5000	600 - 1100	PR 150
PLATEX 185	75 kW / 45 kW	210	480	380	5500	700 - 1500	PR 250 / PR 150
PLATEX 200	75 kW / 45 kW	210	480	380	6400	800 - 1800	PR 250 / PR 150
PLATEX 215	90 kW / 55 kW	230	515	400	7200	1000 - 2000	PR 250

COMMON USES


Soft PVC Transparent, Soft PVC Filled, Rigid PVC Transparent, Rigid PVC Filled, PE+CaCO₃, Wood Plastic, Bio Plastic, Color Masterbath, Plastic Recycling


* Machine dimensions and weights are approximate.

** Capacity datas are approximate values, it may change according to the formulation on your mixture.

*** Reference will be given upon design.

DOCUMENTS AND CERTIFICATES



T.C.
TÜRK PATENT ve MARKA KURUMU
MARKA YENİLEME BELGESİ
Marka No : 2007 46132 - Ticaret



PLETEX
PLASTİK VE METAL

Marka Sahibi : TAKIMSAN DIŞLI KESİCİ TAKIMLARI MAKİNA VE YEDEK PARÇALARI SANAYİ TİCARET LİMİTED ŞİRKETİ
TÜRKİYE CUMHURİYETİ (Arnavutköy)
Ömerli Mh. Kos-Kop San. Sit. Mısır Sk. No:12 Hadımköy Arnavutköy İstanbul

Emtiası : 07
Ağaç, metal, cam ve plastik matzemelerin ve madenlerin işlenmesi, bunlara şekil verilmesi için makineler, takım tezgahları ve bu amaçla kullanılan endüstriyel robotlar.

İşbu Marka ilk defa 27/08/2007 tarihinde tescil edilmiş olup, 27/08/2017 tarihinden itibaren ON YIL süreyle yenilenmiştir.


Prof. Dr. Habip ASAN
Türk Patent ve Marka Kurumu Başkanı


T.C.
TÜRK PATENT ve MARKA KURUMU

TURK PATENT
TÜRK PATENT VE MARKA KURUMU


T.C.
TÜRK PATENT ENSTİTÜSÜ
MARKA TESCİL BELGESİ SURETİ
Marka No : 137948 - Ticaret


TAKIMSAN

Marka Sahibi : TAKIMSAN DIŞLI KESİCİ TAKIMLARI MAKİNA VE YEDEK PARÇALARI SANAYİ TİCARET LİMİTED ŞİRKETİ
TÜRKİYE CUMHURİYETİ
ÖMERLİ MH. KOS-KOP SAN. SİT. MISIR SK. NO:12 HADIMKÖY ARNAVUTKÖY İSTANBUL

Emtiası : 06, 07, 08, 12
Müddil azdırma bıçakları, zincir dişli azdırma bıçakları, grameyer bıçakları, kamahlı mil azdırma, fellows bıçakları ve zincir dişli fellows bıçakları, sonsuz vida ve dişli takımları.

İşbu Marka ilk defa 11/09/1992 tarihinde tescil edilmiş olup, 556 Sayılı Markaların Korunması Hakkında Kanun Hükmünde Kararnamenin 40. Maddesi gereğince 11/09/2012 tarihinden itibaren ON YIL süreyle yenilenmiştir.


E.H.B. AKIN
Enstitü Başkanı.
Markalar Dairesi Başkanı
MUSTAFA ÖZDEMİR
Şube Müdürü


T.C.
TÜRK PATENT ENSTİTÜSÜ


GLOBAL CERTIFICATION NETWORK

CERTIFICATE ATTESTATION OF CONFORMITY

Sertifika No/Certificate No	: GAC-282917
Üretici / Manufacturer	: TAKIMSAN DIŞI KESİCİ TAKIMLARI MAK. VE YEDEK PAR. SAN. TIC. LTD. ŞTİ.
Adres / Address	: ÜMRANİYE MAHALLESİ KOSKOOP SANAYİ SİTESİ MEYDANI NO:12 HANCIHALI / İSTANBUL
Ürün Adı / Product Name	: SÜPÜRÜMÜSÜZ DİREK - ELEK
Marka / Trade Mark	: TAKIMSAN
Model / Type	: 35A-120345 35B-120345 35C-120345
Direktif / Directive	: 2006/95/EC 2014/30/EC
Harcama Standartları / Applicable Standards	: EN 60064-1:2008A1:2009, EN 12160:2010
Rapor No ve Test Raporu Tarihi / Report No and Test Report Date	: M-LVD-02411_04.11.2011

İnceleme Karakteristikleri / Additional Characteristics: Teknik Çizim, Kullanma ve Bakım Kılavuzu, Teknik Resimler v.s. / Technical File, User and Maintenance Guide, Technical Drawings etc...

Aşağıda belirtilen maddeler GCN TÜRK tarafından yukarıda belirtilen direktif ve standartlara göre test edilmiştir. / A sample of the following product has been tested and stated by GCN TÜRK to be in conformity with applicable European Directives referred above.

Test edilen numune ürünün teknik hükümlerini Avrupa normlarına göre uygun olup, ve son değerlendirilme raporlarında ve teknik kılavuzuna göre uygundur. / It may therefore be presumed that the tested sample of the product is in conformity with the technical provisions of the following European Directives including the label amendments, and with national legislation implementing these directives.

Diğer uygulanabilir yasal teknik gereklilikleri sağlanmıştır. Üretici (Aşağıda yerli temsilcisi) ECEEA deklarasyonuna uygunluğunu göre ve in an CE işaretlemesine göre kabul edilen Ürün CE İşareti takı tutuyulmalıdır. / Provided that other applicable directive requirements are satisfied, the manufacturer/European Authorized Representative may draw up an ECEEA Declaration of Conformity and affix the CE marking to each conforming product.

Certificate Date: 06.01.2017
Certificate Validity Date: 06.01.2018

 GLOBAL CERTIFICATION NETWORK


CERTIFICATION MANAGER
Seyhan ÇAY
Ahi Paşa, Tarlabağcı, Çiğir, Demirciler Sok. No:10
Dünya Ümraniye (İSTANBUL)
Tic: 010 202 75 30 (Pbx) Fax: 010 312 44 19
www.gcntrk.com

CE


GLOBAL CERTIFICATION NETWORK

CERTIFICATE ATTESTATION OF CONFORMITY

Sertifika No/Certificate No	: BAC-27917
Üretici / Manufacturer	: TAKIMSAN DIŞI KESİCİ TAKIMLARI MAK. VE YEDEK PAR. SAN. TIC. LTD. ŞTİ.
Adres / Address	: ÜMRANİYE MAHALLESİ KOSKOOP SANAYİ SİTESİ MEYDAN NO:12 HANCIHALI / İSTANBUL
Ürün Adı / Product Name	: PLATEA PLANETARY EXTRUDER
Marka / Trade Mark	: TAKIMSAN
Model / Type	: 150A-ABC-020406/789/10 100A-ABC-020406/789/10 200A-ABC-020406/789/10 35-120345
Direktif / Directive	: 2006/95/EC 2014/30/EC
Harcama Standartları / Applicable Standards	: EN 60064-1:2008A1:2009, EN NO 12160:2010
Rapor No ve Test Raporu Tarihi / Report No and Test Report Date	: M-LVD-02411_04.11.2011

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CE


Alcumus[®]
ISOQR

Certificate of Registration

This is to certify that the Management System of:

TAKIMSAN DIŞI KESİCİ TAKIMLARI MAKİNA VE YEDEK PARÇALARI SAN. TIC. LTD. ŞTİ.
Ömerli Mahallesi, Koskoop Sanayi Sitesi, Mezar Sokak, No:12
Hacımehki Arnavutköy / İstanbul / Türkiye

has been approved by Alcumus ISOQR and is compliant with the requirements of:

ISO 9001:2015

	Certificate Number:	ISOQR1324
	Initial Registration Date:	09 April 2020
	Expiry Date:	08 April 2023

Scope of Registration:

Design and Production of Planetary Extruder Machines and Spare Parts, Gear, Gear Box, Screw and Other Processed Metal Products.

Signed: 
Mustafa Vıncı / General Manager
(on behalf of ISOQR)



ISOQR REGISTRATION NO: 171. Ankara yolu, Parkis Kavşağı Zümresine Hiss Kat: No:29-33 Parkis / İstanbul
T: 0312 398 20 30 (Pbx) F: 0312 398 20 04 www.isoqr.com.tr
Bu sertifikasyon işlemi, ISO 9001:2015 standardının gerektirdiği ve en azından uygulanabilir gerekliliklerin değerlendirilmesini kapsamına almıştır. Bu belge ISOQR'nın, ISO 9001:2015 gerekliliklerini karşılamasını garanti eder.

NOTES



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DİŐLİ KESİCİ TAKIMLARI MAKİNA VE
YEDEK PARÇA SAN.TİC.LTD.ŐTİ.

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