

# HAS MAKİNA

## Warping Machine / özgü Makinası



### Types / Modeller

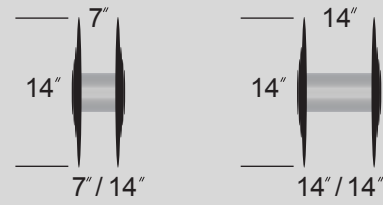
DW-14/14  
DW-21/30  
DW-42/30  
DW-52/30 Tandem  
DW-65/40  
DW-65/60



## DW-14/14



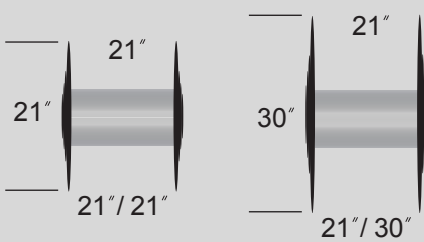
### Compatible Beams / Uygun Makaralar



## DW-21/30



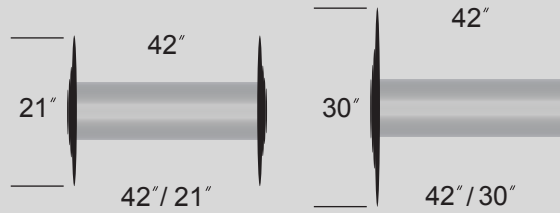
### Compatible Beams / Uygun Makaralar



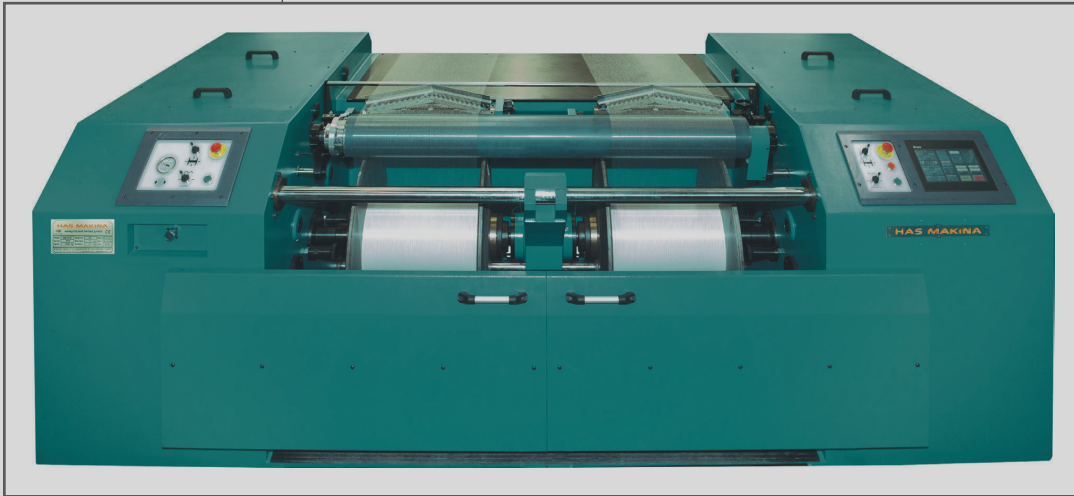
## DW - 42 / 30



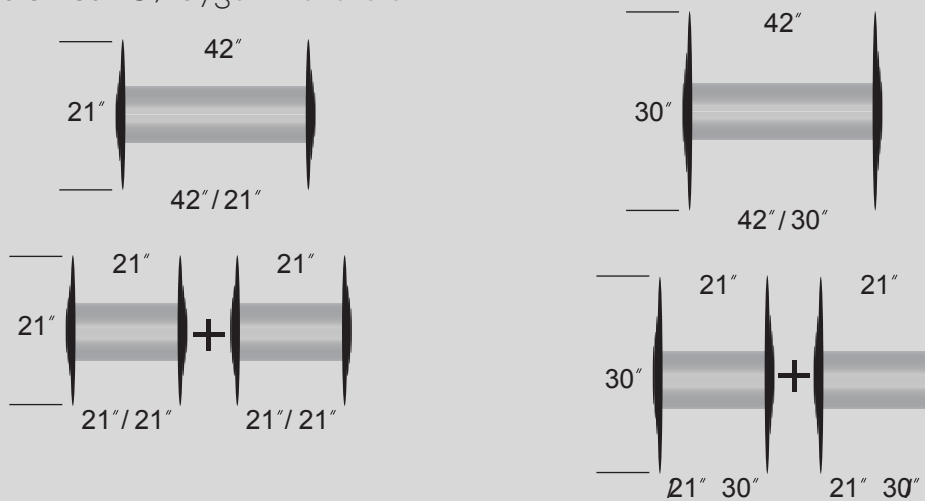
**Compatible Beams / Uygun Makaralar**



## DW - 52 / 30 Tandem



**Compatible Beams / Uygun Makaralar**

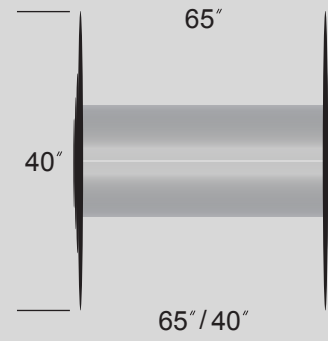


DW-65/40

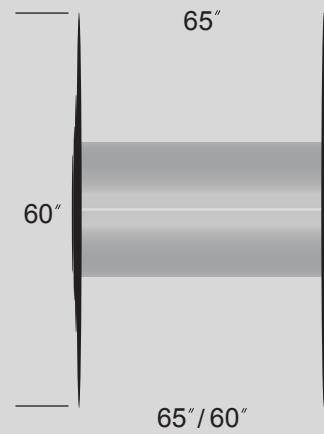
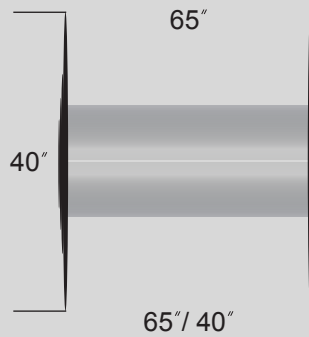


DW-65/60

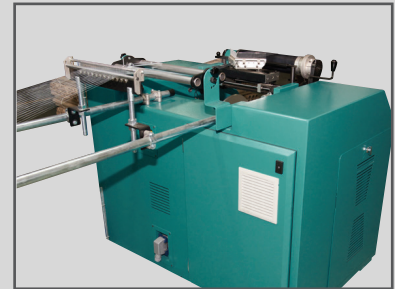
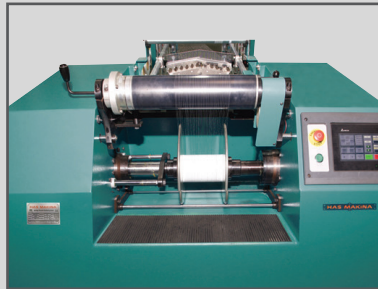
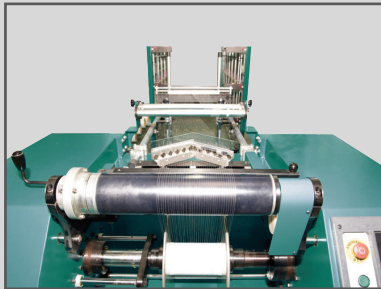
Compatible Beams / Uygun Makaralar



Compatible Beams / Uygun Makaralar



## DW-14/14

**DW-14/14 Properties**

• Main / winder motor power is 4 kw. • Brake system is disc and air system. • Elevator system is actuator piston controlled. • The front cylinder is ceramic coated, the brake system is electrical current suppressed. • Beam copying system is available for standard wrapping of beam diameter dimensions. • All settings are made electronically with a 10" digital touch control panel. • Reed and banding systems can be adjusted automatically. • The wiggle system can be adjusted electronically to the desired size. • Yarn lubrication system is speed controlled and provides equal lubrication. • It destroys the static energy in the yarn with its anti-static device. • Rear tension cylinder is ceramic coated, its engine power is 2.2 kw. It works synchronously with the front main winder. • Yarn collection panel is ceramic perforated. • Maximum speed 750 rpm. • Suitable beam sizes are 7"/14", 14"/14". • It is computer controlled and there is absolute safety for all working conditions.

**DW-14/14 Özellikleri**

• Ana/Sarıcı Motor gücü 4kw'dır. • Fren Sistemi, diskli ve havalı sistemdir. • Asansör Sistemi, Aktuatör Piston kontrollüdür. • Ön silindir seramik kaplamalı, fren sistemi elektrikli akım baskılıdır. • Makara çap ölçülerini standart sarması için makara kopyalama sistemi mevcuttur. • 10" dijital dokunmatik kontrol paneli ile tüm ayarlar elektronik olarak yapılır. • Tarak ve Bantlama sistemleri, otomatik olarak ayarlanabilir. • Vargel sistemi, istenilen ölçü de elektronik olarak ayarlanabilir. • İplik yağlama sistemi, hız kontrollüdür ve eşit oran da yağlama sağlar. • Antistatik cihazı ile iplikteki statik enerjiyi yok eder. • Arka Tansiyon Silindiri seramik kaplamalıdır. • Arka Tansiyon Silindiri seramik kaplamalıdır, motor gücü 2.2kw'dır. Ön ana sarıcı ile senkronize çalışır. • İplik toplama panosu, seramik gözlüdür. • Maksimum hız 750devir/dakika. • Çalışılabilir Makara ebatları 7"/14", 14"/14" • Bilgisayar kontrollüdür ve tüm çalışma koşulları için mutlak güvenlik söz konusudur.

## DW-21/30

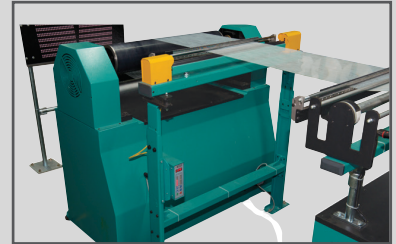
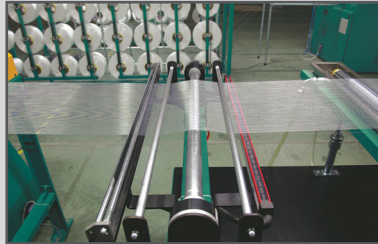


## DW - 21 / 30 Properties

- Main/winder motor power is 7,5 kw.
- Brake system is disc and air system.
- Elevator system is actuator piston controlled.
- The front cylinder is ceramic coated, the brake system is electrical current suppressed.
- Beam copying system is available for standard wrapping of beam diameter dimensions.
- All settings are made electronically with a 10" digital touch control panel.
- Reed and banding systems can be adjusted automatically.
- The wiggle system can be adjusted electronically to the desired size.
- Yarn lubrication system is speed controlled and provides equal lubrication.
- It destroys the static energy in the yarn with its anti-static device.
- The roughness detector has a laser system, it detects the roughness in the yarns very sensitively.
- Rear tension cylinder is ceramic coated, its engine power is 3 kw. It works synchronously with the front main winder.
- Yarn collection panel is ceramic perforated.
- Maximum speed 750 rpm.
- Suitable beam sizes are 21"/30", 21"/21".
- It is computer controlled and there is absolute safety for all working conditions.

## DW - 21 / 30 Özellikleri

- Ana/Sarıcı Motor gücü 7,5kw'dır.
- Fren Sistemi, diskli ve havalı sistemdir.
- Asansör Sistemi, Aktuatör Piston kontrollüdür.
- Ön silindir seramik kaplamalı, fren sistemi elektrikli akım baskılıdır.
- Makara çap ölçülerini standart sarması için makara kopyalama sistemi mevcuttur.
- 10" dijital dokunmatik kontrol paneli ile tüm ayarlar elektronik olarak yapılır.
- Tarak ve Bantlama sistemleri, otomatik olarak ayarlanabilir.
- Vargel sistemi, istenilen ölçü de elektronik olarak ayarlanabilir.
- İplik yağlama sistemi, hız kontrollüdür ve eşit oran da yağlama sağlar.
- Antistatik cihazı ile iplikteki statik enerjiyi yok eder.
- Pürüz dedektörü lazer sistemlidir, İpliklerde ki pürüzleri çok hassas şekilde algılar.
- Arka Tansiyon Silindiri seramik kaplamalıdır, motor gücü 3kw'dır. Ön ana sarıcı ile senkronize çalışır.
- İplik toplama panosu, seramik gözlüdür.
- Maksimum hız 750devir/dakika
- Çalışılabilir Makara ebatları 21"/30", 21"/21"
- Bilgisayar kontrollüdür ve tüm çalışma koşulları için mutlak güvenlik söz konusudur.



## DW-42/30

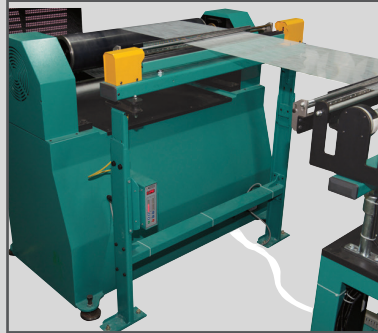
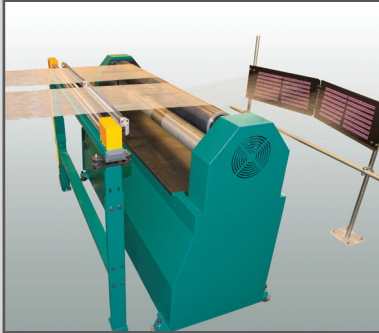


### DW - 42 / 30 Properties

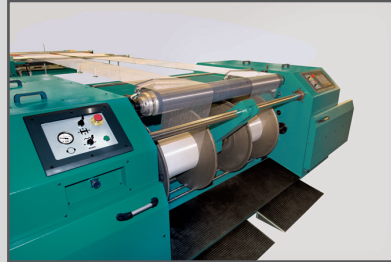
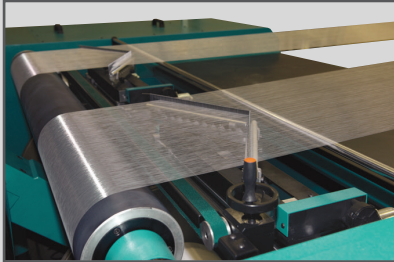
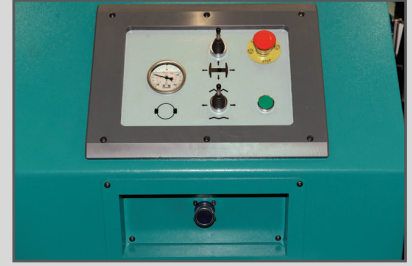
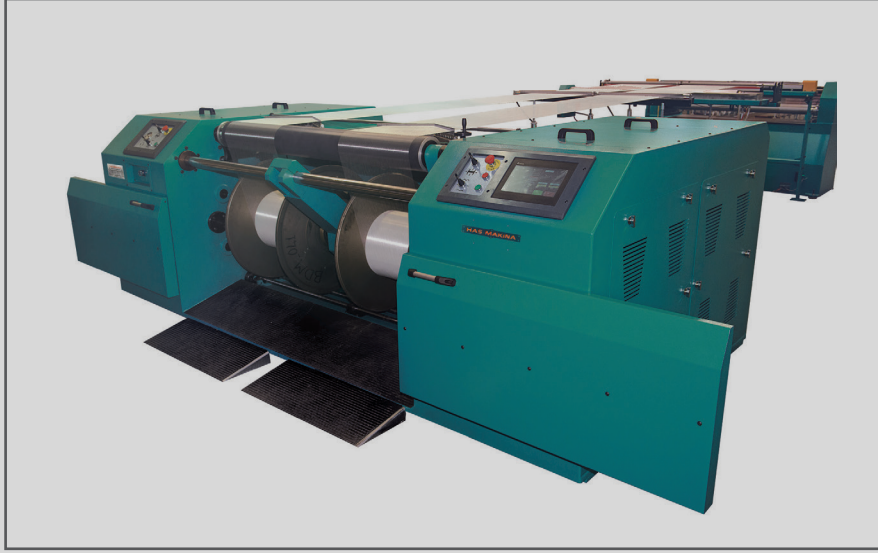
- Main / winder motor power is 11 kw.
- Brake system is disc and hydraulic system.
- Elevator system is actuator piston controlled.
- The front cylinder is ceramic coated, the brake system is electrical current suppressed.
- Beam copying system is available for standard wrapping of beam diameter dimensions.
- All settings are made electronically with a 10" digital touch control panel.
- Reed and banding systems can be adjusted automatically.
- The wiggle system can be adjusted electronically to the desired size.
- Yarn lubrication system is speed controlled and provides equal lubrication.
- It destroys the static energy in the yarn with its anti-static device.
- The roughness detector has a laser system, it detects the roughness in the yarns very sensitively.
- Rear tension cylinder is ceramic coated, its engine power is 5.5 kw. It works synchronously with the front main winder.
- Yarn collection panel is ceramic perforated.
- Maximum speed 750 rpm.
- Suitable beam sizes are 42"/21", 42"/30".
- It is computer controlled and there is absolute safety for all working conditions.

### DW - 42 / 30 Özellikleri

- Ana/Sarıcı Motor gücü 11kw.dır
- Fren Sistemi, diskli ve hidrolik sistemdir.
- Asansör Sistemi, Aktuatör Piston kontrollüdür.
- Ön silindir seramik kaplamalı, fren sistemi elektrikli akım baskılıdır.
- Makara çap ölçülerini standart sarması için makara kopyalama sistemi mevcuttur.
- 10"dijital dokunmatik kontrol paneli ile tüm ayarlar elektronik olarak yapılır.
- Tarak ve Bantlama sistemleri, otomatik olarak ayarlanabilir.
- Vargel sistemi, istenilen ölçü de elektronik olarak ayarlanabilir.
- İplik yağlama sistemi, hız kontrollüdür ve eşit oran da yağlama sağlar.
- Antistatik cihazı ile iplikteki statik enerjiyi yok eder.
- Pürüz dedektörü lazer sistemlidir, ipliklerde ki pürüzleri çok hassas şekilde algılar.
- Arka Tansiyon Silindiri seramik kaplamalıdır, motor gücü 5.5kw.dır. Ön ana sarıcı ile senkronize çalışır.
- İplik toplama panosu, seramik gözlüdür.
- Maksimum hız 750devir/dakika
- Çalışılabilir Makara ebatları 42"/21", 42"/30"
- Bilgisayar kontrollüdür ve tüm çalışma koşulları için mutlak güvenlik söz konusudur.



## DW-52/30 Tandem



### DW - 52 / 30 Properties

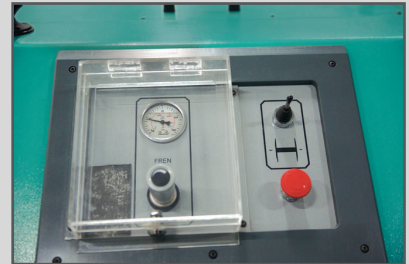
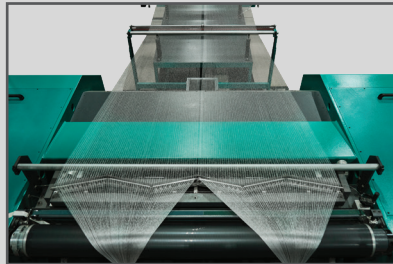
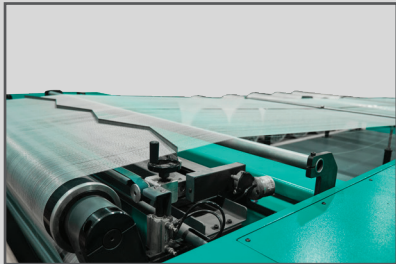
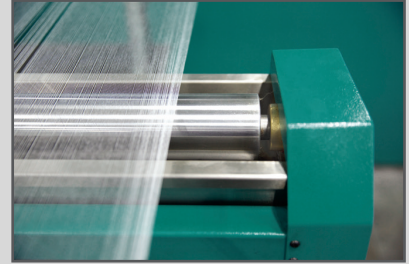
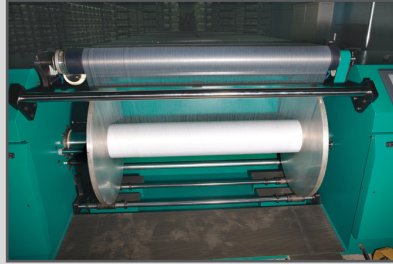
- Main / winder motor power is 11 kw.
- Brake system is disc and hydraulic system.
- Elevator system is hydraulic piston controlled.
- The front cylinder is ceramic coated, the brake system is electrical current suppressed.
- Beam copying system is available for standard wrapping of beam diameter dimensions.
- When the single beam is activated, the main beam winder is automatically moved from the control panel and the beam is aligned to the creel.
- All settings are made electronically with a 10" digital touch control panel.
- Reed and banding systems can be adjusted automatically.
- The wiggle system can be adjusted electronically to the desired size.
- Yarn lubrication system is speed controlled and provides equal lubrication.
- It destroys the static energy in the yarn with its anti-static device.
- Rear tension cylinder is ceramic coated, its engine power is 5.5 kw. It works synchronously with the front main winder.
- Yarn collection panel is ceramic perforated.
- Maximum speed 750 rpm.
- Suitable beams are double beams in 21"/21" Or 21"/30" And single beams in 42"/21" Or 42"/30" size.
- It is computer controlled and there is absolute safety for all working conditions.

### DW - 52 / 30 Özellikleri

- Ana/Sarıcı Motor gücü 11kw'dır
- Fren Sistemi, diskli ve hidrolik sistemdir.
- Asansör Sistemi, Hidrolik Piston kontrollüdür.
- Ön silindir seramik kaplamalı, fren sistemi elektrikli akım baskılıdır.
- Makara çap ölçülerini standart sarması için makara kopyalama sistemi mevcuttur.
- Tek makara çalıştırıldığında da ana makara sarıcı, otomatik olarak kontrol panelinden hareket ettirilerek, makara çağlığa hizalanır.
- 10" dijital dokunmatik kontrol paneli ile tüm ayarlar elektronik olarak yapılır.
- Tarak ve Bantlama sistemleri, otomatik olarak ayarlanabilir.
- Vargel sistemi, istenilen ölçü de elektronik olarak ayarlanabilir.
- İplik yağlama sistemi, hız kontrollüdür ve eşit oran da yağlama sağlar.
- Antistatik cihazı ile iplikteki statik enerjiyi yok eder.
- Arka Tansiyon Silindiri seramik kaplamalıdır, motor gücü 5.5kw'dır. Ön ana sarıcı ile senkronize çalışır.
- İplik toplama panosu, seramik gözlüdür.
- Maksimum hız 750devir/dakika.
- Çalışılabilir Makara ebatları, 21"/21" veya 21"/30" ebatların da çift makara ve 42"/21" veya 42"/30" ebatların da tek makaralar çalışır.
- Bilgisayar kontrollüdür ve tüm çalışma koşulları için mutlak güvenlik söz konusudur.



## DW-65/40



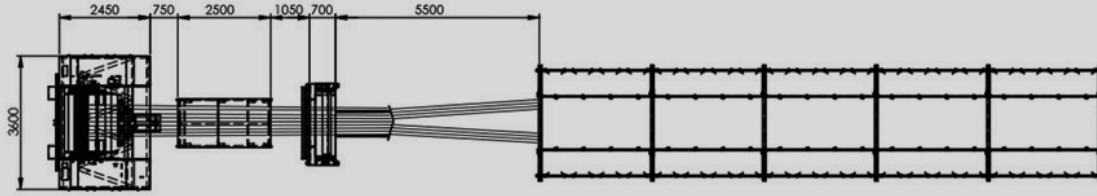
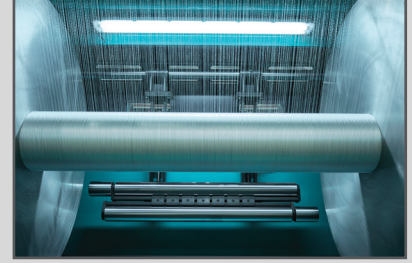
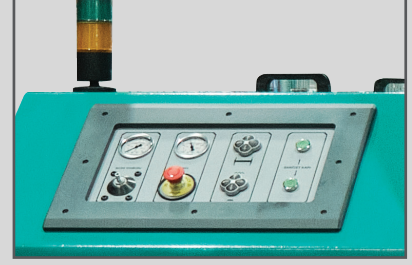
### DW - 65 / 40 Properties

- Main / winder motor power is 30 kw.
- Brake system is disc and hydraulic system.
- Elevator system is hydraulic piston controlled.
- The front cylinder is ceramic coated, the brake system is electrical current suppressed.
- Beam copying system is available for standard wrapping of beam diameter dimensions.
- When the single beam is activated, the main beam winder is automatically moved from the control panel and the beam is aligned to the creel.
- All settings are made electronically with a 10" digital touch control panel.
- Reed and banding systems can be adjusted automatically.
- The wiggle system can be adjusted electronically to the desired size.
- Yarn lubrication system is speed controlled and provides equal lubrication.
- It destroys the static energy in the yarn with its anti-static device.
- Rear tension cylinder is ceramic coated, its engine power is 5.5 kw. It works synchronously with the front main winder.
- Yarn collection panel is ceramic perforated.
- Maximum speed 750 rpm.
- Suitable beam size is 65"/40".
- It is computer controlled and there is absolute safety for all working conditions.

### DW - 65 / 40 Özellikleri

- Ana/Sarıcı Motor gücü 30kw'dır.
- Fren Sistemi, diskli ve hidrolik sistemdir.
- Asansör Sistemi, Hidolik Piston kontrollüdür.
- Ön silindir, seramik kaplamalı, fren sistemi elektrikli akım baskılıdır.
- Makara çap ölçülerini standart sarması için makara kopyalama sistemi mevcuttur.
- 10" dijital dokunmatik kontrol paneli ile tüm ayarlar elektronik olarak yapılır.
- Tarak ve Bantlama sistemleri, otomatik olarak ayarlanabilir.
- Vargel sistemi, istenilen ölçü de elektronik olarak ayarlanabilir.
- İplik yağlama sistemi, hız kontrollüdür ve eşit oran da yağlama sağlar.
- Antistatik cihazı ile iplikteki statik enerjiyi yok eder.
- Arka Tansiyon Silindiri seramik kaplamalıdır, motor gücü 5.5kw'dır. Ön ana sarıcı ile senkronize çalışır.
- İplik toplama panosu, seramik gözlüdür.
- Maksimum hız 750devir/dakika.
- Çalışılabilir Makara ebadı 65"/40"
- Bilgisayar kontrollüdür ve tüm çalışma koşulları için mutlak güvenlik söz konusudur.

## DW-65/60



## DW - 65 / 60 Properties

- Main / winder motor power is 30 kw.
- Brake system is disc and hydraulic system.
- Elevator system is hydraulic piston controlled.
- The front cylinder is ceramic coated, the brake system is electrical current suppressed.
- Beam copying system is available for standard wrapping of beam diameter dimensions.
- When the single beam is activated, the main beam winder is automatically moved from the control panel and the beam is aligned to the creel.
- All settings are made electronically with a 10" digital touch control panel.
- Reed and banding systems can be adjusted automatically.
- The wiggle system can be adjusted electronically to the desired size.
- Yarn lubrication system is speed controlled and provides equal lubrication.
- It destroys the static energy in the yarn with its anti-static device.
- Rear tension cylinder is ceramic coated, its engine power is 5.5 kw. It works synchronously with the front main winder.
- Yarn collection panel is ceramic perforated.
- Maximum speed 750 rpm.
- Suitable beam sizes are 65"/40", 65"/60".
- It is computer controlled and there is absolute safety for all working conditions.

## DW - 65 / 60 Özellikleri

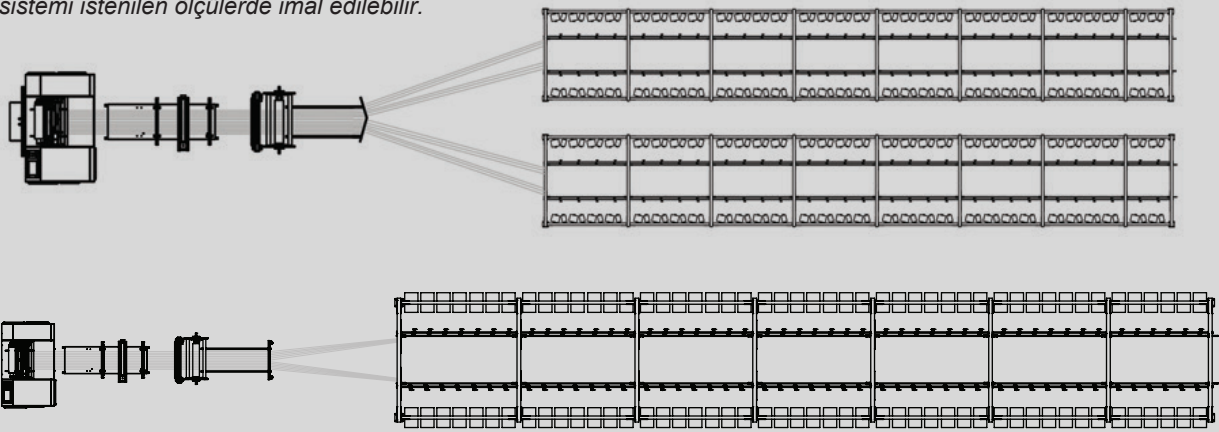
- Ana/Sarıcı Motor gücü 30kw'dır.
- Fren Sistemi, diskli ve hidrolik sistemdir.
- Asansör Sistemi, Hidrolik Piston kontrollüdür.
- Ön silindir, seramik kaplamalı, fren sistemi elektrikli akım baskılıdır.
- Makara çap ölçülerini standart sarması için makara kopyalama sistemi mevcuttur.
- 10" dijital dokunmatik kontrol paneli ile tüm ayarlar elektronik olarak yapılır.
- Tarak ve Bantlama sistemleri, otomatik olarak ayarlanabilir.
- Vargel sistemi, istenilen ölçü de elektronik olarak ayarlanabilir.
- İplik yağlama sistemi, hız kontrollüdür ve eşit oran da yağlama sağlar.
- Antistatik cihazı ile iplikteki statik enerjiyi yok eder.
- Arka Tansiyon Silindiri seramik kaplamalıdır, motor gücü 5.5kw'dır, ön ana sarıcı ile senkronize çalışır.
- İplik toplama panosu, seramik gözlüdür.
- Maksimum hız 750devir/dakika.
- Çalışılabilir Makara ebatları 65"/40", 65"/60"
- Bilgisayar kontrollüdür ve tüm çalışma koşulları için mutlak güvenlik söz konusudur.

# CREEL SYSTEM / CAĞLIK SİSTEMİ



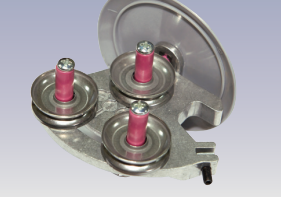
Creel system can be manufactured in custom sizes.

Cağlık sistemi istenilen ölçülerde imal edilebilir.

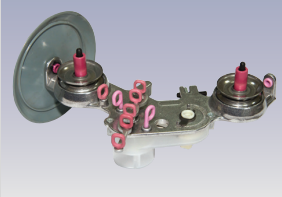


## Creel Parts Cağlık Parçaları

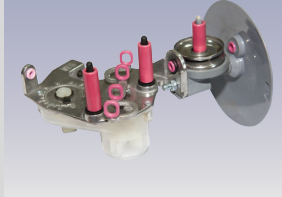
HT-1000



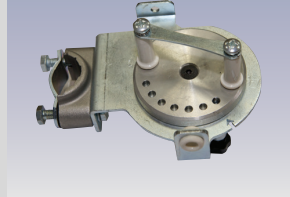
HT-1003



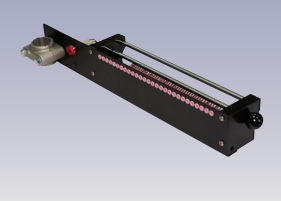
HT-1004



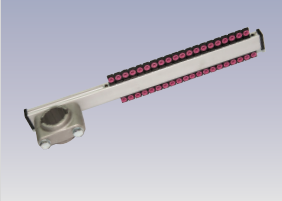
HT-1005



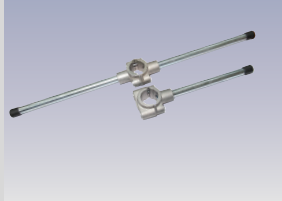
HMOT-1009



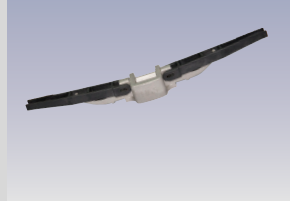
HMTK-1012



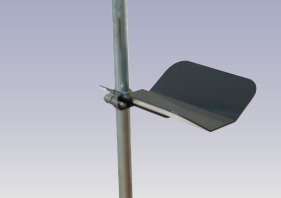
HBT-1004



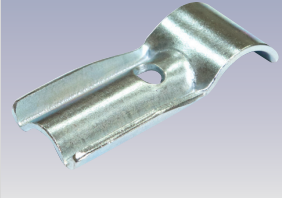
HBT-1005



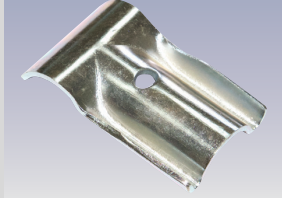
HBT-1006



HBKT-1006



HBKT-1007



HBKT-1008



# HAS MAKİNA



## HAS MAKİNA SAN. TİC. LTD. ŞTİ.

Deliklikaya Mah. Teskoop Sanayi Sitesi Karavan Cad. No:13 Arnavutköy/İSTANBUL

Tel: +90 212 279 77 50 Fax: +90 0212 279 77 43

E-mail: [info@hasmakina.com.tr](mailto:info@hasmakina.com.tr) [www.hasmakina.com.tr](http://www.hasmakina.com.tr)

