

# MUTLUSAN PLASTIK ELEKTRİK SAN.VE TIC.A.Ş. TEST REPORT

## SCOPE OF WORK

Protection testing for the insulated steel spiral pipe (IP67) against water and dust according to IEC/EN 60529

## REPORT NUMBER

202400505IST

## ISSUE DATE

03.07.2024

## PAGES

8

## PROJECT NUMBER

IST24Q.0603.00

## NAME OF TESTING LABORATORY PREPARING THE REPORT

INTERTEK TEST HİZMETLERİ A.Ş. ELECTRIC LABORATORY



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## TEST RAPORU /TESTING REPORT

<b>Proje No:</b> /Project Number	IST24Q.0603.00
<b>Hizmet:</b> /Service	Protection testing for the insulated steel spiral pipe (IP67) against water and dust according to IEC/EN 60529
<b>Ürün:</b> /Product	Spiral pipe
<b>Ürün Tanımı:</b> /Product Description	Insulated steel spiral pipe
<b>Firma İsmi:</b> /Company Name	MUTLUSAN PLASTIK ELEKTRİK SAN.VE TIC.A.Ş.
<b>Firma Adresi:</b> /Company Address	İkitelli O.S.B. Enkoop Cad. No:7 Başakşehir / İstanbul / TÜRKİYE
<b>Kontakt Kişi:</b> /Contact	Serap DEMİRBAŞ

Deney laboratuvarı olarak faaliyet gösteren Intertek Test Hizmetleri A.S. TÜRKAK'tan AB-0823-T ile yukarıda belirtilen standartlara göre akredite edilmiştir.

*Intertek Test Hizmetleri AS was accredited by TÜRKAK under registration number AB-0823-T for standards specified above as test laboratory.*

Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.

*Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.*

Deney ve/veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda belirtilmiştir.

*The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.*

Aksi talep edilmediği sürece Intertek Türkiye Elektrik Laboratuvarı Paylaşılan Risk Karar Kuralını (Basit Kabul Kuralı) uygulamaktadır.

*The Intertek Turkey Electrical Laboratory applies the Shared Risk Decision Rule (Simple Acceptance Rule) unless otherwise requested.*

Kuralın Tanımı: Eğer ürün veya test metodu, laboratuvar raporunda uygunluk bildirim zorunlu kılar, ancak ilgili standartlarda veya mevzuatta uygunluğun değerlendirilmesinde, güven düzeyinin ve ölçme belirsizliğinin etkilerine ilişkin herhangi bir bilgi yok ise Laboratuvar, güven düzeyi ve ölçüm belirsizliğini göz önünde bulundurmaksızın elde edilen test sonucunun yalnızca belirtilmiş sınırlar içinde olup olmadığına karar vererek uygun veya uygun değildir şeklinde değerlendirmesini yapabilir. Bu kural dünya çapında en fazla kullanılan kuraldır. Bu kural uygulandığında test metotlarına ait toplam belirsizlikler rapor üzerinde belirtilmez.

*Intertek Electric Laboratory applies the Shared Risk Decision Rule (Simple Acceptance Rule). If the product or test method requires a declaration of conformity in the laboratory report, however, if there is no information whatsoever regarding the effects of the confidence level and measurement uncertainty in terms of the evaluation of conformity in the relevant standards or legislation, the laboratory may consider the test result obtained without considering the confidence level and measurement uncertainty and decide whether it remains within the specified limits and evaluate it as appropriate or not appropriate. This rule is the most used rule worldwide. When this rule is applied, the total uncertainties of the test methods are not indicated on the report.*

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Sonuçlar, yaklaşık %95'lik bir güven düzeyi veren 2 kapsama faktörü ( $k=2$ ) kullanılarak hesaplanan genişletilmiş bir belirsizlikle rapor edilir.  
*The results are reported with an expanded uncertainty calculated using a coverage factor  $k=2$ , which gives a level of confidence of approximately 95%*

İmzasız raporlar geçersizdir. Bu rapor laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz, üçüncü şahıslarla paylaşamaz ve reklam aracı olarak kullanılamaz.

*Testing reports without signature are not valid. This report cannot be partially copied and reproduced, shared with third parties and used as an advertising tool without the written permission of the laboratory.*

Numune müşteri tarafından sağlanmıştır ve raporda verilen ölçüm sonuçları sadece test edilen numune için geçerlidir.  
*Sample has been provided by the customer and measurement results are only valid for the appliance which are tested.*

Bu test raporunda (\*) ile işaretlenen testler , bu laboratuvarın TÜRKAK akreditasyon kapsamında yer almamaktadır.  
*Tests marked with (\*) in this test report are not within the scope of TÜRKAK accreditation of this laboratory.*

## BÖLÜM 1

### /SECTION 1

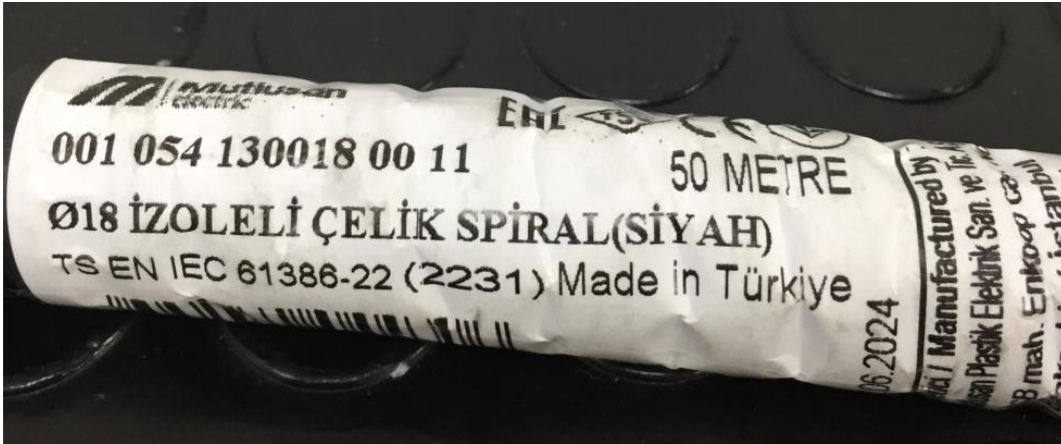
## BAŞVURU SAHİBİ TARAFINDAN SAĞLANAN MÜHENDİSLİK NUMUNELERİNE İLİŞKİN BİLGİLER: /INFORMATIONS FOR ENGINEERING SAMPLES PROVIDED BY APPLICANT

Test /Testing	
Test Numunesi Geliş Tarihi /Date of receipt of test item	27.06.2024
Test Numunesi Kabul No /Test item receipt number	S24.0693
Test Numunesi Seri No /Test item serial number	Engineering samples
Test Tarihi /Date (s) of performance of tests	02.07.2024 - 03.07.2024

Standartlar /Standards	
1-	IEC 60529 Ed. 2.2 b:2013
2-	EN 60529:1991 + A1:2000 + A2:2013

## İŞARETLEME ETİKETLERİ: /MARKING PLATES

### İşaretleme Etiketleri /Marking Plates



## BÖLÜM 2 /SECTION 2

### TEST METODU VE YAPILIŞ: /TEST METHOD AND APPLICATION

#### 13.4 Dust test for first characteristic numeral 6

The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50 µm and the nominal width of a gap between wires 75 µm. The amount of talcum powder to be used is 2 kg per cubic meter of the test chamber volume. It shall not have been used for more than 20 tests.

The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test. Test period 8 hours.

#### 14.2.7 Test for second characteristic numeral 7: temporary immersion between 0.15 m and 1 m

The test is made by completely immersing the enclosure in water in its service position as specified by the manufacturer. The highest point of enclosures with a height equal to or greater than 850 mm is located 150 mm below the surface of the water.

Immersion tank Water-level on enclosure: 0.15 m above top 1 m above bottom. The duration of the test is 30 min.

**BÖLÜM 3****/SECTION 3****TEST SONUÇLARI:****/TEST RESULTS**

IP6X test was applied to the samples. As a result of the test, no observed dust inside the enclosure.

IPX7 test was applied to the samples. As a result of the test, no observed water inside the enclosure.

**Ortam Şartları****/Ambient Conditions**

23.1°C, 55% Rh

<b>Madde</b> <b>/Clause</b>	<b>Tanım</b> <b>/Description</b>	<b>Sonuç</b> <b>/Result</b>
13.4	Tests for protection against solid foreign objects indicated by the first characteristic numeral (IP6X).	<b>P</b>
14.2.7	Tests for protection against water indicated by the second characteristic numeral (IPX7).	<b>P</b>
<b>Supplementary Information:</b> <b>/Ek Bilgi:</b>		
<b>P: Uygun / Conformed</b> <b>F: Uygunsuzluk / Non-Conformity</b> <b>N/A: Uygulanabilir değil / Not Applicable</b>		

**Testi Gerçekleştiren:****/Completed by**

Anıl DİLBER

**Ünvan:****/Title**

Project Engineer

**İmza:****/Signature****Tarih:****/Date**

03.07.2024

**Onaylayan:****/Reviewed by**

İhsan HAMZAÇEBİ

**Ünvan:****/Title**

Senior Project Engineer

**İmza:****/Signature****Tarih:****/Date**

03.07.2024



## BÖLÜM 4

### /SECTION 4

#### TEST EKİPMANLARI:

##### /TEST EQUIPMENT

Ekipman Adı /Equipment Name	Üretici /Manufacturer	Ekipman /ID	Kalibrasyon Tarihi /Calibration Date	Sonraki Kal. Tarihi /Next Cal. Date
Dust cabinet	ÖZ MAKİNE	EN 242	01.2023	01.2026
Chronometer	Casio HS-80TW	EN 113	02.2024	02.2025
Tape	Ceta Form P05-0519	EN 193	09.2021	09.2024



## BÖLÜM 5 /SECTION 5

### FOTO DOKÜMANTASYON: /PHOTO DOCUMENTATION



**Photo 1.** General view of the insulated steel spiral pipes



### IDENTITY DECLARATION

Mutlusan Plastic Electric Inc. We declare that the products in the list below; raw material is the same as the product coded 001 054 130018 00 11 tested in the IP67 test report with report number 2024005051ST.

PRODUCT CODE	PRODUCT NAME
001 054 130007 00 11	Ø7 ISOLATED METAL SPIRAL(BLACK)
001 054 130009 00 00	Ø9 ISOLATED METAL SPIRAL(WHITE)
001 054 130009 00 11	Ø9 ISOLATED METAL SPIRAL(BLACK)
001 054 130011 00 11	Ø11 ISOLATED METAL SPIRAL(BLACK)
001 054 130011 00 17	Ø11 ISOLATED METAL SPIRAL(GREY)
001 054 130014 00 11	Ø14 ISOLATED METAL SPIRAL(BLACK)
001 054 130014 00 17	Ø14 ISOLATED METAL SPIRAL(GREY)
001 054 130016 00 00	Ø16 ISOLATED METAL SPIRAL(WHITE)
001 054 130016 00 11	Ø16 ISOLATED METAL SPIRAL(BLACK)
001 054 130016 00 17	Ø16 ISOLATED METAL SPIRAL(GREY)
001 054 130018 00 00	Ø18 ISOLATED METAL SPIRAL(WHITE)
001 054 130018 00 11	Ø18 ISOLATED METAL SPIRAL(BLACK)
001 054 130018 00 17	Ø18 ISOLATED METAL SPIRAL(GREY)
001 054 130020 00 00	Ø20 ISOLATED METAL SPIRAL(WHITE)
001 054 130020 00 11	Ø20 ISOLATED METAL SPIRAL(BLACK)
001 054 130021 00 11	Ø21 ISOLATED METAL SPIRAL(BLACK)
001 054 130021 00 17	Ø21 ISOLATED METAL SPIRAL(GREY)
001 054 130025 00 00	Ø25 ISOLATED METAL SPIRAL(WHITE)
001 054 130025 00 11	Ø25 ISOLATED METAL SPIRAL(BLACK)
001 054 130026 00 00	Ø26 ISOLATED METAL SPIRAL(WHITE)
001 054 130026 00 11	Ø26 ISOLATED METAL SPIRAL(BLACK)
001 054 130026 00 17	Ø26 ISOLATED METAL SPIRAL(GREY)
001 054 130029 00 00	Ø29 ISOLATED METAL SPIRAL(WHITE)
001 054 130029 00 11	Ø29 ISOLATED METAL SPIRAL(BLACK)
001 054 130029 00 17	Ø29 ISOLATED METAL SPIRAL(GREY)
001 054 130030 00 11	Ø30 ISOLATED METAL SPIRAL(BLACK)
001 054 130030 00 17	Ø30 ISOLATED METAL SPIRAL(GREY)
001 054 130032 00 00	Ø32 ISOLATED METAL SPIRAL(WHITE)
001 054 130032 00 11	Ø32 ISOLATED METAL SPIRAL(BLACK)
001 054 130037 00 11	Ø37 ISOLATED METAL SPIRAL(BLACK)
001 054 130037 00 17	Ø37 ISOLATED METAL SPIRAL(GREY)
001 054 130042 00 11	Ø42 ISOLATED METAL SPIRAL(BLACK)
001 054 130042 00 17	Ø42 ISOLATED METAL SPIRAL(GREY)
001 054 130050 00 11	Ø50 ISOLATED METAL SPIRAL(BLACK)
001 054 130050 00 17	Ø50 ISOLATED METAL SPIRAL(GREY)
001 054 130063 00 11	Ø63 ISOLATED METAL SPIRAL(BLACK)
001 054 140009 00 11	Ø9 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140009 25 11	Ø9 ISOLATED METAL SPIRAL(WIRED)(BLACK)(25MT)
001 054 140011 00 11	Ø11 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140011 25 11	Ø11 ISOLATED METAL SPIRAL(WIRED)(BLACK)(25MT)
001 054 140014 00 11	Ø14 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140014 25 11	Ø14 ISOLATED METAL SPIRAL(WIRED)(BLACK)(25MT)
001 054 140016 00 11	Ø16 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140016 25 11	Ø16 ISOLATED METAL SPIRAL(WIRED)(BLACK)(25MT)

001 054 140018 00 11	Ø18 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140018 25 11	Ø18 ISOLATED METAL SPIRAL(WIRED)(BLACK)(25MT)
001 054 140020 00 11	Ø20 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140021 00 11	Ø21 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140021 25 11	Ø21 ISOLATED METAL SPIRAL(WIRED)(BLACK)(25MT)
001 054 140024 00 11	Ø24 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140025 00 11	Ø25 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140026 00 11	Ø26 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140029 00 11	Ø29 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140030 00 11	Ø30 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140032 00 11	Ø32 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140037 00 11	Ø37 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140042 00 11	Ø42 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140050 00 11	Ø50 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 140063 00 11	Ø63 ISOLATED METAL SPIRAL(WIRED)(BLACK)
001 054 160009 00 11	Ø9 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160011 00 11	Ø11 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160014 00 11	Ø14 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160016 00 11	Ø16 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160018 00 11	Ø18 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160018 00 17	Ø18 ISOLATED STEEL SPIRAL(GREY)EKO
001 054 160021 00 11	Ø21 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160021 00 17	Ø21 ISOLATED STEEL SPIRAL(GRAY)EKO
001 054 160026 00 11	Ø26 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 160029 00 11	Ø29 ISOLATED STEEL SPIRAL EKO
001 054 160032 00 11	Ø32 ISOLATED STEEL SPIRAL EKO
001 054 160035 00 11	Ø35 ISOLATED STEEL SPIRAL EKO
001 054 160037 00 11	Ø37 ISOLATED STEEL SPIRAL EKO
001 054 160040 00 11	Ø40 ISOLATED STEEL SPIRAL EKO
001 054 160042 00 11	Ø42 ISOLATED STEEL SPIRAL EKO
001 054 160050 00 11	Ø50 ISOLATED STEEL SPIRAL EKO
001 054 160063 00 11	Ø63 ISOLATED STEEL SPIRAL(BLACK)EKO
001 054 231011 00 11	Ø11 ISOLATED STEEL SPIRAL(WIRED)(BLACK)EKO
001 054 231014 00 11	Ø14 ISOLATED STEEL SPIRAL(WIRED)(BLACK)EKO
001 054 231016 00 11	Ø16 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231018 00 11	Ø18 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231021 00 11	Ø21 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231026 00 11	Ø26 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231029 00 11	Ø29 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231032 00 11	Ø32 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231037 00 11	Ø37 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231042 00 11	Ø42 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231050 00 11	Ø50 ISOLATED STEEL SPIRAL(WIRED)EKO
001 054 231063 00 11	Ø63 ISOLATED STEEL SPIRAL(WIRED)EKO

  
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**AYNIYET BEYANI**

Mutlusan Plastik Elektrik A.Ş. olarak aşağıdaki listede yer alan ürünlerin; rapor numarası 202400505IST olan IP67 test raporunda testi yapılan 001 054 130018 00 11 kodlu ürünle hammadde olarak aynı olduğunu beyan ederiz.

ÜRÜN KODU	ÜRÜN TANIMI
001 054 130007 00 11	Ø7 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130009 00 00	Ø9 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130009 00 11	Ø9 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130011 00 11	Ø11 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130011 00 17	Ø11 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130014 00 11	Ø14 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130014 00 17	Ø14 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130016 00 00	Ø16 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130016 00 11	Ø16 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130016 00 17	Ø16 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130018 00 00	Ø18 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130018 00 11	Ø18 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130018 00 17	Ø18 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130020 00 00	Ø20 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130020 00 11	Ø20 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130021 00 11	Ø21 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130021 00 17	Ø21 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130025 00 00	Ø25 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130025 00 11	Ø25 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130026 00 00	Ø26 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130026 00 11	Ø26 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130026 00 17	Ø26 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130029 00 00	Ø29 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130029 00 11	Ø29 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130029 00 17	Ø29 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130030 00 11	Ø30 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130030 00 17	Ø30 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130032 00 00	Ø32 İZOLELİ ÇELİK SİRAL(BEYAZ)
001 054 130032 00 11	Ø32 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130037 00 11	Ø37 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130037 00 17	Ø37 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130042 00 11	Ø42 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130042 00 17	Ø42 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130050 00 11	Ø50 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 130050 00 17	Ø50 İZOLELİ ÇELİK SİRAL(GRİ)
001 054 130063 00 11	Ø63 İZOLELİ ÇELİK SİRAL(SİYAH)
001 054 140009 00 11	Ø9 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)
001 054 140009 25 11	Ø9 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)(25MT)
001 054 140011 00 11	Ø11 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)
001 054 140011 25 11	Ø11 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)(25MT)
001 054 140014 00 11	Ø14 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)
001 054 140014 25 11	Ø14 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)(25MT)
001 054 140016 00 11	Ø16 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)
001 054 140016 25 11	Ø16 İZOLELİ ÇELİK SİRAL(TELLİ)(SİYAH)(25MT)

001 054 140018 00 11	Ø18 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140018 25 11	Ø18 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)(25MT)
001 054 140020 00 11	Ø20 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140021 00 11	Ø21 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140021 25 11	Ø21 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)(25MT)
001 054 140024 00 11	Ø24 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140025 00 11	Ø25 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140026 00 11	Ø26 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140029 00 11	Ø29 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140030 00 11	Ø30 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140032 00 11	Ø32 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140037 00 11	Ø37 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140042 00 11	Ø42 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140050 00 11	Ø50 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 140063 00 11	Ø63 İZOLELİ ÇELİK SİRİRAL(TELLİ)(SİYAH)
001 054 160009 00 11	Ø9 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160011 00 11	Ø11 İZOLELİ ÇELİK SİRİRAL (3/8) (EKO)
001 054 160014 00 11	Ø14 İZOLELİ ÇELİK SİRİRAL (1/2) (EKO)
001 054 160016 00 11	Ø16 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160018 00 11	Ø18 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160018 00 17	Ø18 İZOLELİ ÇELİK SİRİRAL (EKO) (GRİ)
001 054 160021 00 11	Ø21 İZOLELİ ÇELİK SİRİRAL (3/4) (EKO)
001 054 160021 00 17	Ø21 İZOLELİ ÇELİK SİRİRAL (3/4) (EKO) (GRİ)
001 054 160026 00 11	Ø26 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160029 00 11	Ø29 İZOLELİ ÇELİK SİRİRAL (1 1/4) (EKO)
001 054 160032 00 11	Ø32 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160035 00 11	Ø35 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160037 00 11	Ø37 İZOLELİ ÇELİK SİRİRAL (1 /2) (EKO)
001 054 160040 00 11	Ø40 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160042 00 11	Ø42 İZOLELİ ÇELİK SİRİRAL (EKO)
001 054 160050 00 11	Ø50 İZOLELİ ÇELİK SİRİRAL (2) (EKO)
001 054 160063 00 11	Ø63 İZOLELİ ÇELİK SİRİRAL(SİYAH)(EKO)
001 054 231011 00 11	Ø11 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(3/8)(EKO)
001 054 231014 00 11	Ø14 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(1/2)(EKO)
001 054 231016 00 11	Ø16 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(EKO)
001 054 231018 00 11	Ø18 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ) (EKO)
001 054 231021 00 11	Ø21 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(3/4)(EKO)
001 054 231026 00 11	Ø26 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(1)(EKO)
001 054 231029 00 11	Ø29 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(1-1/4)(EKO)
001 054 231032 00 11	Ø32 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(1/2)(EKO)
001 054 231037 00 11	Ø37 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(1/2)(EKO)
001 054 231042 00 11	Ø42 İZOLELİ ÇELİK SİRİRAL (KLAVUZ TELLİ) (EKO)
001 054 231050 00 11	Ø50 İZOLELİ ÇELİK SİRİRAL(KLAVUZ TELLİ)(2)(EKO)
001 054 231063 00 11	Ø63 İZOLELİ ÇELİK SİRİRAL( KLAVUZ TELLİ) EKO

  
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