

OVERVIEW / KEY SPECS

# TITIANS-350D / TITIANS-350D PLUS / TITIANS- 500D PLUS

## Low-Spatter MIG/MAG Family

A product specification reference for Titians-350D / Titians-350D Plus / Titians-500D Plus, including key processes, technical data, controls, and buyer selection details.

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|                                                                                 |                                                               |                                                                        |                                                                         |
|---------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <p>OUTPUT CLASSES</p> <p><b>350A / 500A</b></p> <p>LOW-SPATTER FAMILY RANGE</p> | <p>DUTY CYCLE</p> <p><b>60%</b></p> <p>RATED FAMILY VALUE</p> | <p>INPUT POWER</p> <p><b>380V</b></p> <p>3-PHASE INDUSTRIAL SUPPLY</p> | <p>FEEDER</p> <p><b>External</b></p> <p>SEPARATE WIRE-FEEDER SYSTEM</p> |
|---------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|

### QUICK SPECS

| FIELD                | SPECIFICATION                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| Product type         | Low-spatter MIG/MAG welding family with external wire feeder                                                               |
| models               | Titians-350D base; Titians-350D Plus pulse; Titians-500D Plus pulse                                                        |
| Positioning          | Carbon-steel and stainless-steel workshop line focused on stable arc control and lower cleanup                             |
| Input power          | AC380V +/-10%, 50Hz, 3PH                                                                                                   |
| Output current range | 30-350 A for 350-class options; 30-500 A for Titians-500D Plus                                                             |
| Wire diameter        | 0.8-1.2 mm for 350-class options; 1.0-1.6 mm for 500-class option                                                          |
| Feeder architecture  | External wire feeder; main panel and feeder panel can adjust welding parameters                                            |
| Image note           | System images identify the low-spatter external-feeder family; product color and market graphics can vary by order package |

### PRODUCT HIGHLIGHTS

| FEATURE            | BENEFIT                                                                                          |
|--------------------|--------------------------------------------------------------------------------------------------|
| Low-spatter story  | Gives distributors a practical carbon-steel and stainless alternative to general MIG/MAG pages   |
| Clear model ladder | One spec sheet can route buyers from 350A base to 350A pulse and 500A pulse                      |
| Workshop operation | Separate feeder, stored parameters, and closed-loop voltage control support repeatable shop work |

## TECHNICAL SECTION

# MODEL SELECTOR

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## 350A BASE LOW-SPATTER OPTION

**Titians-350D**


| FIELD         | VALUE            |
|---------------|------------------|
| Route         | Base low-spatter |
| Pulse scope   | Non-pulse        |
| Output range  | 30-350 A         |
| Wire diameter | 0.8-1.2 mm       |

## 350A PULSE LOW-SPATTER OPTION

**Titians-350D Plus**


| FIELD         | VALUE            |
|---------------|------------------|
| Route         | Plus low-spatter |
| Pulse scope   | Single-pulse     |
| Output range  | 30-350 A         |
| Wire diameter | 0.8-1.2 mm       |

## 500A PULSE LOW-SPATTER OPTION

**Titians-500D Plus**


| FIELD         | VALUE        |
|---------------|--------------|
| Route         | 500A Plus    |
| Pulse scope   | Single-pulse |
| Output range  | 30-500 A     |
| Wire diameter | 1.0-1.6 mm   |

## MODEL SELECTOR

| MODEL             | COOLING    | FEEDER / PACKAGE     | MACHINE DIMENSIONS           | NET WEIGHT      |
|-------------------|------------|----------------------|------------------------------|-----------------|
| Titians-350D      | Air-cooled | External wire feeder | 350A base low-spatter route  | 0.8-1.2 mm wire |
| Titians-350D Plus | Air-cooled | External wire feeder | 350A pulse low-spatter route | 0.8-1.2 mm wire |
| Titians-500D Plus | Air-cooled | External wire feeder | 500A pulse low-spatter route | 1.0-1.6 mm wire |

## DIMENSIONS AND WEIGHT

| ITEM              | MACHINE / PACKAGE DIMENSIONS | WEIGHT              | DETAILS                        |
|-------------------|------------------------------|---------------------|--------------------------------|
| Titians-350D      | 94 x 42 x 64 cm              | 66 x 28.5 x 46.5 cm | 40.5 kg + 23 kg feeder         |
| Titians-350D Plus | 94 x 42 x 64 cm              | 66 x 28.5 x 46.5 cm | 40.5 kg + 23 kg feeder         |
| Titians-500D Plus | 94 x 42 x 64 cm              | 66 x 28.5 x 46.5 cm | 45 kg main body + 23 kg feeder |

## SELECTOR DECISION

| APPLICATION NEED                       | RECOMMENDED ROUTE                       | SELECTION                               |
|----------------------------------------|-----------------------------------------|-----------------------------------------|
| Need 350A base low-spatter work        | Titians-350D                            | Base low-spatter MIG/MAG route          |
| Need 350A pulse low-spatter work       | Titians-350D Plus                       | Plus route with single-pulse capability |
| Need 500A low-spatter capacity         | Titians-500D Plus                       | Higher-output Plus route                |
| Need aluminum double-pulse positioning | MIG-350 / MIG-350X / MIG-500 / MIG-500X | Route out of low-spatter page           |
| Need economy double-pulse price ladder | MIG-350E / MIG-500E                     | Route to economy E-series page          |
| Need basic CO2 MIG/MAG only            | NBC series                              | Route to basic CO2 MIG/MAG page         |

Titians-350D / Titians-350D Plus / Titians-500D Plus supports the welding processes and setup paths listed below.

PROCESS CAPABILITY

| PROCESS / MODE                     | APPLICATION MEANING                                                                          |
|------------------------------------|----------------------------------------------------------------------------------------------|
| Low-spatter MIG/MAG                | Core gas-shielded welding platform for the family                                            |
| Pulse MIG/MAG                      | Titians-350D Plus and Titians-500D Plus add single-pulse capability                          |
| Carbon steel and stainless steel   | Primary material focus for the low-spatter family                                            |
| Manual welding / argon arc welding | Secondary process discussion by selected package                                             |
| Aluminum double pulse              | Not the story for this page; route aluminum-focused buyers to MIG / MIG-X double-pulse pages |

TECHNOLOGY / CONTROL FEATURES

| FEATURE                      | CUSTOMER BENEFIT                                                                   |
|------------------------------|------------------------------------------------------------------------------------|
| Low-spatter waveform control | Digital control and fine waveform control support lower-spatter setup.             |
| Closed-loop voltage control  | Helps welding voltage remain stable under grid fluctuation and arc-length changes. |
| Main + feeder adjustment     | Main panel and external wire feeder can both adjust welding parameters             |
| 100 feeder memories          | Feeder memory supports repeat shop setup.                                          |
| Base vs Plus ladder          | Base model for low-spatter MIG/MAG; Plus models add pulse capability.              |
| 500A upgrade                 | Titians-500D Plus gives the same low-spatter story a higher-current route.         |

RECOMMENDED USE

|                                                                                                                                                    |                                                                                                                   |                                                                                                                                       |                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <p><b>Distributor low-spatter line</b></p> <p>Best for dealers who need a carbon-steel and stainless low-spatter story beside standard MIG/MAG</p> | <p><b>3-phase fabrication shops</b></p> <p>Fits indoor 380V 3-phase workshops with gas-shielded welding setup</p> | <p><b>Repeated production tasks</b></p> <p>Feeder-side adjustment and saved parameters support repeat work after approved wording</p> | <p><b>Capacity upgrade path</b></p> <p>350A base, 350A pulse, and 500A pulse sit in one product ladder</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|



MATERIALS / WIRE / GAS

Material, wire, and gas choices depend on the workpiece, process, and application target.

MATERIAL / WIRE / GAS MATRIX

| PROCESS                  | MATERIAL / SCOPE                          | WIRE / ELECTRODE            | GAS / SETUP             | APPLICATION                                        |
|--------------------------|-------------------------------------------|-----------------------------|-------------------------|----------------------------------------------------|
| Titians-350D / 350D Plus | Carbon steel; stainless steel             | 0.8-1.2 mm wire             | 5-15 L/min gas flow     | 350A low-spatter route                             |
| Titians-500D Plus        | Carbon steel; stainless steel; mild steel | 1.0-1.6 mm wire             | 5-15 L/min gas flow     | 500A low-spatter route                             |
| Low-spatter operation    | Carbon steel / stainless shop work        | Match wire to model         | 5-15 L/min gas flow     | Use selected model and package                     |
| Aluminum / double pulse  | Application-specific route                | Use double-pulse MIG family | Argon setup by material | Route aluminum-focused buyers to MIG / MIG-X pages |

# TECHNICAL SPECIFICATIONS

Key electrical, output, dimensional, and installation values for product selection.

## TECHNICAL SPECIFICATIONS

| PARAMETER                     | SPECIFICATION                                                     |
|-------------------------------|-------------------------------------------------------------------|
| model family                  | Titians-350D / Titians-350D Plus / Titians-500D Plus              |
| Primary process               | Low-spatter MIG/MAG / gas-shielded welding                        |
| Pulse scope                   | Titians-350D is non-pulse; Plus options are single-pulse          |
| Input voltage                 | AC380V +/-10%, 50Hz, 3PH                                          |
| Rated input power             | 14.8 kVA for 350-class options; 24 kVA for 500-class option       |
| Output current range          | 30-350 A; 30-500 A for Titians-500D Plus                          |
| Rated duty cycle              | 60%                                                               |
| Output voltage characteristic | CV                                                                |
| No-load voltage               | 68.5 V for 350-class options; 72 V for Titians-500D Plus          |
| Power factor                  | >=0.93                                                            |
| Efficiency                    | >=85%                                                             |
| Wire diameter                 | 0.8-1.2 mm for 350-class options; 1.0-1.6 mm for 500-class option |
| Gas flow rate                 | 5-15 L/min                                                        |
| Insulation class              | F                                                                 |
| Wire feed speed               | Available on request                                              |
| Protection grade              | Available on request                                              |

## POWER AND SITE REQUIREMENTS

| FIELD                  | REQUIREMENT                                                                             |
|------------------------|-----------------------------------------------------------------------------------------|
| Deployment environment | Indoor workshop with 3-phase 380V industrial power and shielding gas setup              |
| Feeder setup           | External wire feeder; keep feeder dimensions visible in the spec logic                  |
| Cooling                | Air-cooled in SKU master for all three models                                           |
| Screen / UI class      | No LCD in SKU master; describe as digital knob / panel workflow, not LCD workflow       |
| document scope         | No model-specific certificate mapped yet                                                |
| Documents              | Certificates and market documents are provided according to destination and model scope |

**Input voltage.** Listed input voltage values are the standard order setup. Other input voltage options depend on destination and order package.

TECHNICAL SECTION

## PANEL / ACCESSORIES

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Operator controls, operating modes, and accessory details for product evaluation.

### OPERATOR CONTROL AREAS

| FUNCTION                                | DESCRIPTION                                                                  |
|-----------------------------------------|------------------------------------------------------------------------------|
| <b>Separate parameter mode</b>          | Individual parameter workflow                                                |
| <b>Synergic / one-knob mode</b>         | Setup mode for simpler operator adjustment                                   |
| <b>Gas selection</b>                    | Control function for gas setup                                               |
| <b>Wire-diameter selection</b>          | Control function for wire setup                                              |
| <b>Feeder-side parameter adjustment</b> | Main panel and external wire feeder panel can both adjust welding parameters |
| <b>Parameter memory</b>                 | Feeder memories support repeat shop setup                                    |
| <b>Fault-code diagnostics</b>           | Service workflow available through DEYUN support                             |

### OPERATION MODES

| MODE                            | DESCRIPTION                                |
|---------------------------------|--------------------------------------------|
| <b>Separate parameter mode</b>  | Individual parameter workflow              |
| <b>Synergic / one-knob mode</b> | Setup mode for simpler operator adjustment |
| <b>Gas selection</b>            | Control function for gas setup             |
| <b>Wire-diameter selection</b>  | Control function for wire setup            |

### INCLUDED / OPTIONAL ACCESSORIES

| ITEM                            | STATUS               | DETAILS                                                |
|---------------------------------|----------------------|--------------------------------------------------------|
| <b>Welding torch</b>            | Standard included    | Standard MIG package item                              |
| <b>Earth wire / earth clamp</b> | Standard included    | Work return connection                                 |
| <b>Wire liner</b>               | Standard included    | Match liner to wire type                               |
| <b>Wire feed roll</b>           | Standard included    | Match roll to wire type                                |
| <b>External wire feeder</b>     | Package component    | External feeder for all three options                  |
| <b>Trolley / cart</b>           | Package-specific     | Mobility setup depends on selected order package       |
| <b>Operation documents</b>      | Available on request | Market documents depend on destination and model scope |