

August 19, 2015

**SUBJECT:** Support for the 505, 505E, & 505 Enhanced product lines

Woodward introduced its 505/505E controller product line in 1988, which has grown to become the standard for industrial steam turbine OEMs and users globally. Since that time, Woodward has continued to invest in and improve this product line in the form of new improved hardware, control algorithms and user interfaces. This product line has enjoyed much success in the market and continues to be an important part of Woodward's control offerings. Woodward is dedicated to providing you with the information and tools necessary continue to operate your existing controller or transition to one of the following new improved models:

| Existing Model Name                 | New Model Name | Application  |
|-------------------------------------|----------------|--|
| 505                                 | 505            | Single valve steam turbines  |
| 505E                                | 505XT          | Single valve or single extraction turbines and additional I/O (via LinkNet-HT modules)   |
| 505 Enhanced                        | 505DR          | Single valve or single extraction turbines with dual redundant switching capability  |
| ALL<br>(505, 505E and 505 Enhanced) | 505CS          | Single valve or single extraction turbines with dual redundant switching capability and custom PLC programming and additional I/O (via LinkNet-HT modules) |

It is recommended that existing 505, 505E and 505 Enhanced users plan appropriately for migration to the new and improved models to experience the related control and operational improvements. With the exception of a few small wiring differences and improved/different terminal blocks, these new 505 control models are designed be a direct replacement for the existing 505 controllers. If required, a 505 "drop-in" replacement cable is available that eliminates the need for re-wiring. In addition, these new controllers are built off the same field proven software program as the original 505 controllers, enabling users to easily configure them to function and perform exactly like the older 505 control models if desired.

As post production support is an important part of Woodward's tier-one service and to 505, 505E, & 505 Enhanced users globally Woodward has developed the following product support plan to ensure long term factory support throughout the life of your product and during the migration process:

February 20, 2015:

- New 505 models released
- Begin migrating all 505 orders to the new models
- Continued availability of old 505 models for use as spare units for existing installations

February 15, 2016:

- New 505XT models schedule release
- Begin migrating all 505E orders to new 505XT models
- Continued availability of old 505E models for use as spare units for existing installations

February 15, 2017:

- New 505DR & 505CS models scheduled release
- Begin migrating 505 Enhanced orders for dual redundant applications to 505DR or 505CS models
- Continued availability of old 505 Enhanced models for use as spare units for existing installations

February 15, 2018:

- Sale of old 505, 505E, & 505 Enhanced models for new applications discontinued
- Continued availability of old 505, 505E & 505 Enhanced models for use as spare units for existing installations
- Unlimited repair of old 505, 505E, & 505 Enhanced models
- Service exchange of old 505, 505E and 505 Enhanced models with available Woodward stock
- New 505, 505XT, 505DR, & 505CS replacement models available

February 15, 2020:

- Sales of all old 505, 505E, & 505 Enhanced models for use as spare units discontinued
- Unlimited repair of old 505, 505E, & 505 Enhanced models
- Service exchange of old 505, 505E and 505 Enhanced models with available Woodward stock
- New 505, 505XT, 505DR, & 505CS replacement models available

February 15, 2023:

- Limited repair of old 505, 505E and 505 Enhanced models based on parts availability
- Limited service exchange of old 505, 505E and 505 Enhanced models with available Woodward stock
- New 505, 505XT, 505DR, & 505CS replacement models available

February 15, 2028:

- New 505, 505XT, 505DR, & 505CS replacement models available

Parts obsolescence from electronic manufacturers can present a challenge to post-life support plans. Woodward strives to hold inventory, or look for alternative parts when components are obsolete. However, there are times when components can simply not be obtained and where sufficient last-time buys cannot be made. In these cases, Woodward cannot always guarantee that we can maintain the rationalization support plan.

Regards,



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