Our goal

ABB Avangard is transforming from being a traditional supplier to be a market partner with the intention to offer broad customised services not exclusively focusing on product sales.
Retrofit

Upgrading existing, outdated systems with the most modern components to optimize technical, reliability and profitability aspects of the system.

- Exchange
- Replacement
- Modernization
- Rehabilitation
- Increase in capacity
- Upgrading
- Refurbishing
ABB Avangard performs following retrofit activities:

- Retrofit of medium voltage switchgears
- Retrofit of secondary systems
- Retrofit of high voltage disconnectors by exchanging the existing operating mechanism with motor drive mechanism type SM 1500
- Overhaul of oil - minimum circuit breaker type MMO
Retrofit of medium voltage switchgear

Movable parts:

- commutation apparatus

Fast physical and moral ageing

ABB Avangard
Retrofit of medium voltage switchgear

Secondary commutation:

- relay protection
- control equipment
- measuring equipment

Fast moral ageing

ABB Avangard
Retrofit of medium voltage switchgear

Our range of services:
- Replacing of the old breaker
- Replacing disconnector switches
- Replacing instrument transformers
- Renewal of phase insulation
- Renewal of bus bars and feeder bars
- Fitting of protection devices
You gain:

- increased reliability and safety
- reduced maintenance costs
- increased remaining life time with minimum 20 years
Thermo Plant Blagoevgrad, BG

Retrofit of Russian switchgear by replacing the old oil - minimum breaker with SF₆ circuit breaker type HPA.
ABB Avangard - retrofit solutions

Retrofit of Russian switchgear by replacing the oil-minimum breaker with SF$_6$ circuit breaker type HPA.
Retrofit of polish switchgear by replacing the oil - minimum breaker with vacuum breaker type VD4
Retrofit of Russian switchgear by replacing of the airblast breaker with vacuum breaker type VM1

Retrofit of Russian switchgear by replacing the oil- minimum breaker with SF$_6$ circuit breaker type HPA

ABB Avangard - retrofit solutions
Retrofit of Russian switchgear by replacing the old oil-minimum circuit breaker with vacuum breaker type VM1
ABB Avangard - retrofit solutions
Retrofit of Russian switchgear by replacing the oil-minimum breaker with SF$_6$ circuit breaker type HD4
Retrofit of Bulgarian switchgear by replacing the oil minimum breaker with SF₆ circuit breaker type HPA
Retrofit of Russian switchgear by replacing the oil-minimum breaker with SF$_6$ circuit breaker type HD4
Retrofit of Russian switchgear by replacing the oil- minimum breaker with SF₆ circuit breaker type HD4 and HD4
Retrofit of Polish switchgear by replacing the oil-minimum breaker with SF$_6$ circuit breaker type VD4

TPP Bobov Dol, BG
ABB Avangard - retrofit solutions

Retrofit of Russian switchgear by replacing the air breaker with vacuum circuit breaker type VM1

TPP Maritza II, BG
Retrofit of Russian switchgear by replacing the oil-minimum breaker with vacuum circuit breaker type VM1

TPP Varna; BG

ABB Avangard
# Reference List

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