

FIELD SWAPPABLE ANODES & CATHODES

ADVANCING FLASH X-RAY:
EFFORTLESS ANODE AND
CATHODE MANAGEMENT
FOR PRECISION RESULTS

STREAMLINED MAINTENANCE
AND TAILORED ANODE SOLU-
TIONS ENABLE HIGH-QUALITY
FLASH X-RAY IMAGING

SCF Anode & Cathode advantages

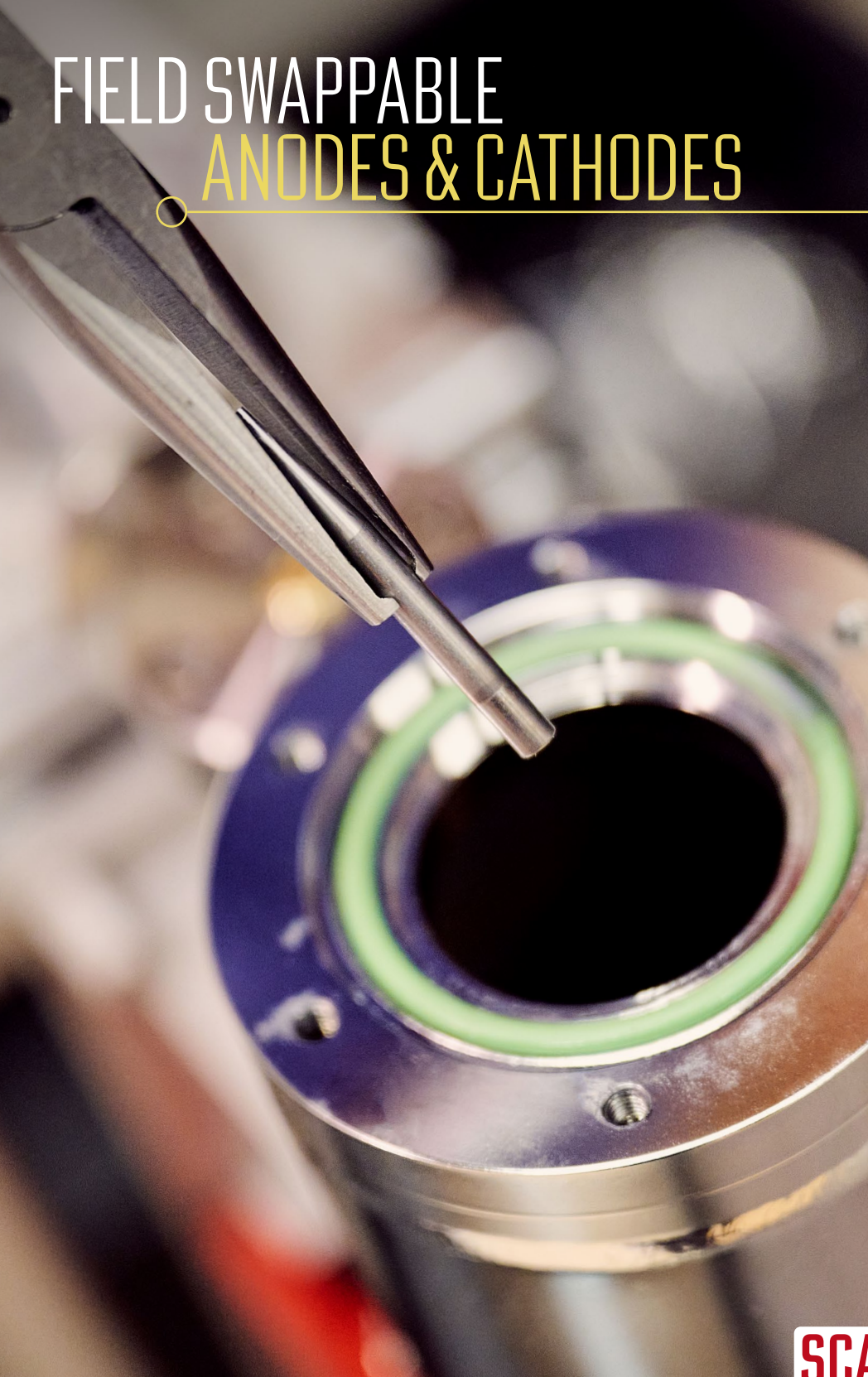
- Convenient on-site swapping
- Cost-effective operation
- Various optional sizes available
- Tungsten standard option
- Additional material choices available
- Swap anode & cathode pairs in minutes

Accessory products

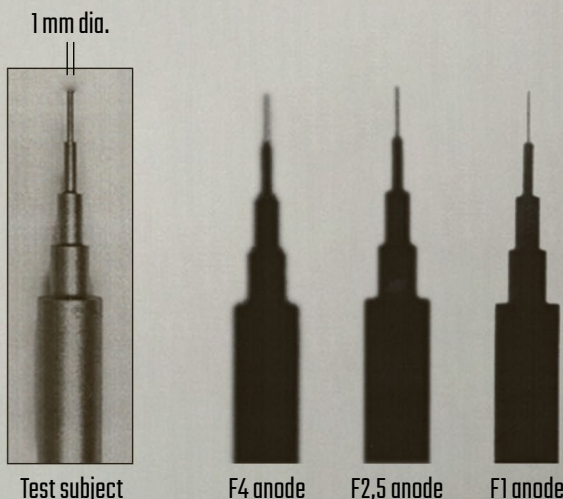
RPS30 service station

Modularity

Fits all SCF systems

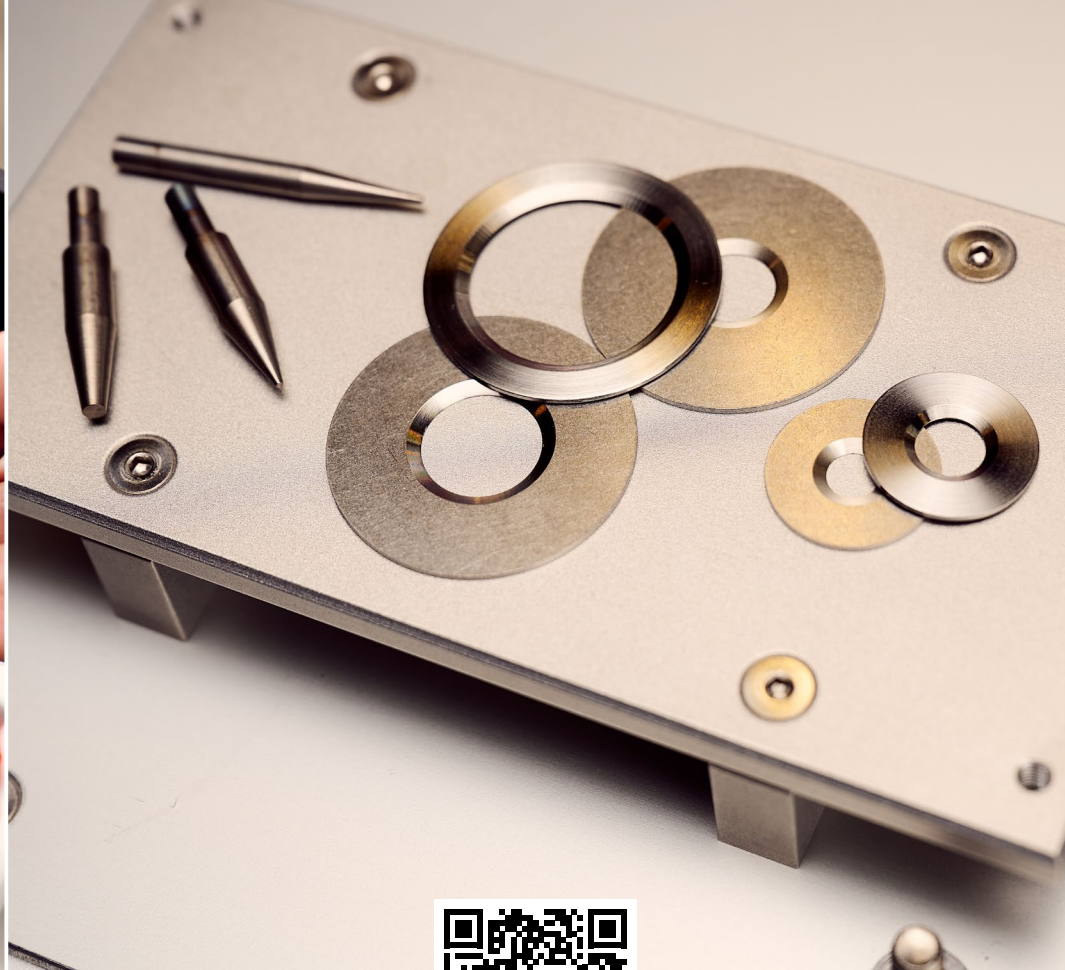


www.scandiflash.com



Sample X-ray images
of the test subject with
three Scandiflash
anode options. Note
smaller anodes yield
sharper images.





scan this for more info



Effortless anode and cathode swapping for streamlined maintenance and cost-efficiency

Imagine the task of producing an abundance of X-rays in an astonishingly brief span, all to capture impeccably clear images of swiftly moving objects without motion blur. While a conventional X-ray apparatus comfortably operates in the keV/mA range, dishing out a few hundred watts of power, our Flash X-ray systems thrive in the keV/kA realm, achieving the remarkable feat of freezing frames within just 20 nanoseconds. This level of power enables the capture of images of objects hurtling at speeds of kilometers per second.

However, this intensified power usage exacts a toll on the anode, leading to accelerated wear and necessitating more frequent replacements compared to their continuous source counterparts. Here's where the Scandiflash flash X-ray tubes really shine, designed to facilitate effortless maintenance and straightforward anode/cathode replacements. The process entails opening the tube, removing the old anode, and seamlessly installing a new one.

Tailored Anode Sizes for Enhanced Flexibility

A pivotal factor impacting the lifespan of the anode is its thickness – thinner anodes wear out quicker and warrant more frequent replacement. Nevertheless, thinner anodes yield images with heightened detail. Scandiflash anode options include the F1, F2,5 and F4, catering to experiments where additional resolution is imperative.

Engineered for durability and ease

Distinguishing itself from X-ray tubes featuring delicate glass-sealed configurations found in other sources, our X-ray tubes boast robust metal vacuum-tight casings, which effortlessly accommodate shifts to anodes of varying sizes (alongside matching cathodes).

Enhanced Maintenance through the RPS30 Service Station

Streamlining this process is the RPS30 service station – a haven for tools and spare parts, offering a service-friendly positioning for the tube, and enabling vacuum restoration via the RPS30 turbo molecular pump. This station transforms maintenance into a simplified and efficient undertaking.

Seamless anode and cathode replacement

Swapping anodes becomes a straightforward endeavor – remove the X-ray window, replace the existing anode with a new one using basic tools, and if the cathode necessitates replacement, our anode/cathode alignment tool guarantees precise alignment.

| Anode-Cathode compatibility | | | |
|-----------------------------|---------------|---------------|---------------|
| System | F1 | F2,5 | F4 |
| 150 | D6 - 1000169 | D6 - 1000169 | D8 - 1000170 |
| 300 | D10 - 1000162 | D10 - 1000162 | D12 - 1000163 |
| 450 | D12 - 1000163 | D14 - 1000164 | D16 - 1000165 |
| 450S | D12 - 1000163 | D16 - 1000165 | D16 - 1000165 |
| 1200 | D20 - 1000167 | D20 - 1000167 | D25 - 1000168 |
| 150-MAT | D6 - 1000169 | D6 - 1000169 | D8 - 1000170 |
| 300-MAT | D10 - 1000171 | D10 - 1000171 | D12 - 1000172 |
| 450-MAT | D12 - 1000172 | D12 - 1000172 | - |

| Number of flashes per anode. Cathode and window replaced every 5th anode. | | | |
|--|-----|------|-----|
| System | F1 | F2,5 | F4 |
| 150 | 100 | 200 | 500 |
| 300 | 50 | 100 | 300 |
| 450 | 40 | 75 | 200 |
| 450S | 30 | 60 | 150 |
| 1200 | 20 | 40 | 100 |