



DCI AND BLOODHOUND

ULTRA-FAST WASHOUT SPEEDS

Performance enhancing upgrades for improved imaging analysis

Concept

The Dual Concentric Injector (DCI) is a high-efficiency sample transport device designed to move particles from the ablation site directly to the tip of the ICP injector with low mixing, resulting in much faster washout times.

Bloodhound is a sample chamber modification that works with the DCI to further reduce washout times.

Overall, the DCI and Bloodhound can give up to a 100 fold improvement in washout speeds, allowing much faster scan rates and repetition rates to be used for much faster imaging.

DCI and Bloodhound Specifications summary

Features

Dual concentric injector (DCI) reduces washout speeds by factor of up to 20

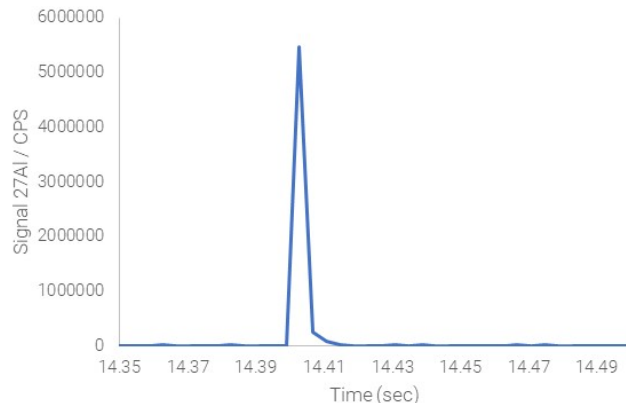
Bloodhound reduces washout by a further factor of 5

Improved spatial resolution in imaging experiments

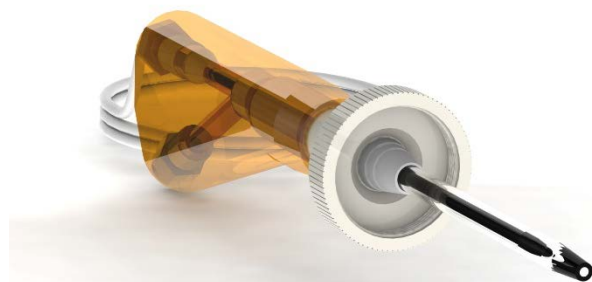
Faster imaging speeds with less lateral "smearing"

Improved signal intensity

Patent pending



Ultra-fast transition of a single shot using DCI and Bloodhound



The DCI torch interface

Performance Specifications

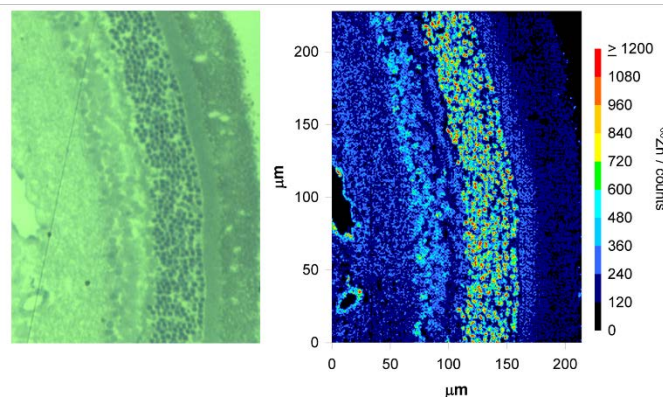
DCI washout	50 ms
Bloodhound washout	10 ms
DCI fitting time	<5 minutes

Compatibility

Platforms	NWR193, NWR213, NWRfemto, NWRimage
Sample chambers	TwoVol2 (100mm) TwoVol2 (150mm)

Additional Options

Signal Smoothers	Glass bulb signal smoother and Sentinel signal smoother
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Example of a high resolution, high speed image acquired using DCI and Bloodhound