

Pressure Deconvolution = DCV

Inverse problem to [pressure convolution](#), performed as a fully or semi-automated search for initial pressure for every well and [Unit-rate Transient Responses \(UTR\)](#) for wells and cross-well intervals in order to fit the [sandface pressure](#) response (usually recalculated from [PDG](#) data using [wellbore flow model](#) for depth adjustment) to [total sandface flow rate](#) variation history (usually recalculated from daily allocations based on [surface well tests](#)).

The [Pressure Deconvolution](#) techniques are usually classified into the following options which use specific mathematical apparatus and deliver different volume of information:

Single-well deconvolution (SDCV)	Multi-well deconvolution (MDCV)	
Applied to a stand-alone well with no interference from other wells	Applied to a group of interfering wells	
	Radial Deconvolution (RDCV)	Cross-well Deconvolution (XDCV)
	Applied to a well with BHP readings and no account of the BHP readings in offset wells	Applied to a group of wells with account of all BHP and rate history

See Also

[Petroleum Industry](#) / [Upstream](#) / [Production](#) / [Subsurface Production](#) / [Field Study & Modelling](#) / [Production Analysis](#)
[[Well Testing](#) / [Pressure Testing](#) / [Pressure convolution](#)]
[[SDCV](#)][[SDCV @model](#)][[SDCV @sample](#)]
[[MDCV](#) / [RDCV](#)][[RDCV @model](#)][[RDCV @sample](#)]
[[MDCV](#) / [XDCV](#)][[XDCV @model](#)][[XDCV @sample](#)]
[[Well & Reservoir Surveillance](#)] [[Pressure Diffusion](#)] [[Pressure drawdown](#)]
[[Convolution @math](#)]

References

[Arthur Aslanyan, Mathematical aspects of Multiwell Deconvolution and its relation to Capacitance Resistance Model, arxiv.org/abs/2203.01319](#)