



# QIA Symphony CARTRIDGE

CASE STUDY

## THE CHALLENGE



Biological samples are extremely diverse requiring a large number of methods and chemistries to purify nucleic acids and provide them in a format for further processing.

## THE GOAL



Build a low cost disposable, pre-filled, IVD compliant cartridge that accommodates for dozens of different magnetic bead chemistries. The cartridge is filled, assembled and sealed in an automated production. Will be opened automatically by the QIASymphony system and can be resealed if not completely used. Shelf life of the cartridge is > 1 year. Production cost are equal or lower than comparable spin column products.



## THE APPROACH

Individual troughs are deep-drawn and heat sealed for low cost and long term storage. The heat seal withstands aggressive chemicals for an indefinite storage period. Troughs are held together with a frame for easy handling. A 2D barcode will identify the individual troughs. A plastic disposable piercing device is used to punch holes to allow pipetting head to pick up reagents. Low volume enzymes are stored in a separate rack for cold storage and can be attached to the through rack to build one handling unit.



## THE RESULT

The QIASymphony cartridge is an extremely cost-effective and reliable reagent storage container used thousand-fold in diagnostic laboratories around the world.