

# 17

## Contract Services

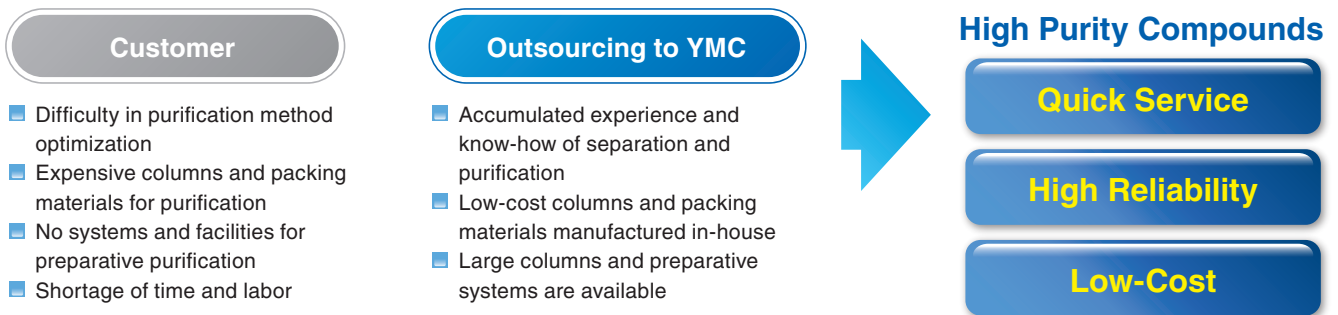
Contract purification -----168-169

## Contract purification

With all chromatographic experiences that we have accumulated since establishment of YMC, we offer fee-based method development and purification services. The fields we can support are, but not limited to, pharmaceutical, food, electrochemical and natural product. YMC has variety of packing materials, various chromatography skids/dynamic axial compression columns, GMP compliant purification plant and most importantly talented skilled human resources. YMC provides the most efficient method development/purification services in terms of time and cost by combining those resources.

### Advantages of contract purification

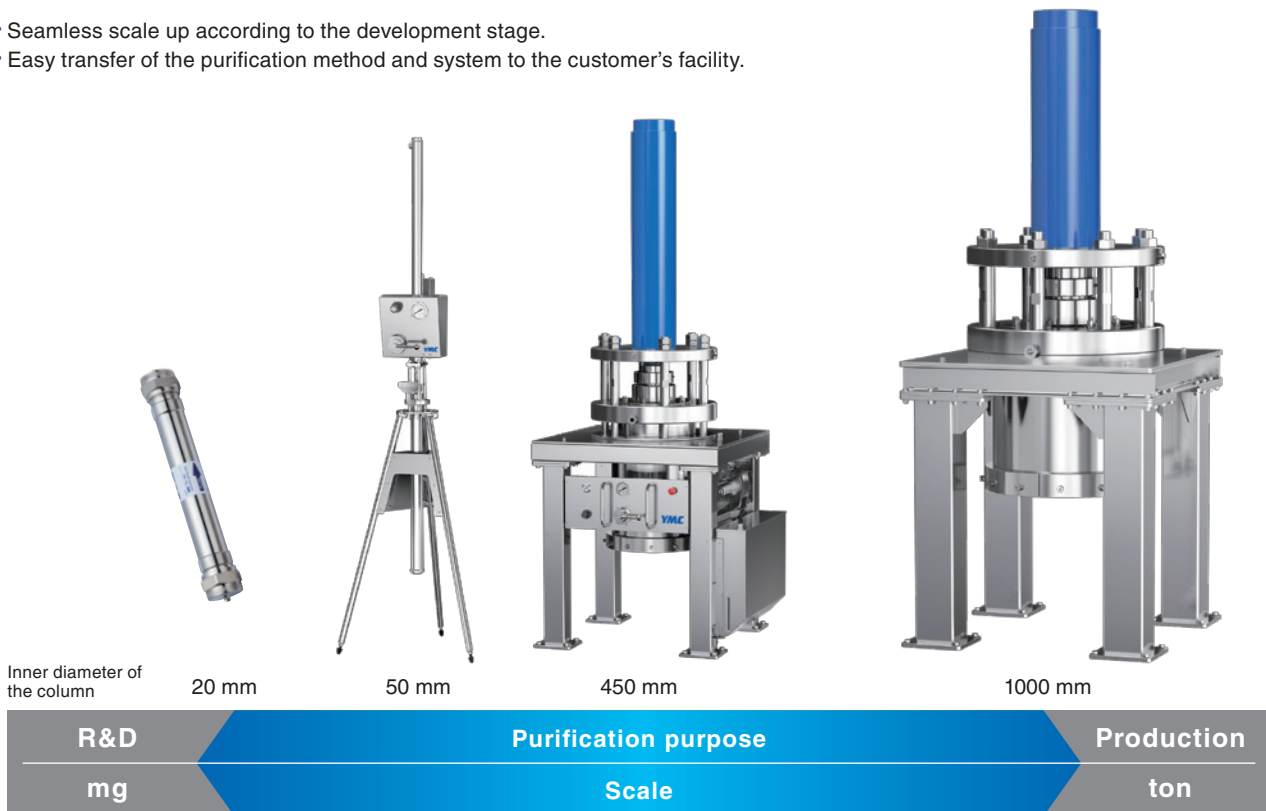
Separation and purification using chromatography can require advanced technology, time, and cost. YMC provides purification services with our accumulated experience, know-how, and excellent equipment. In addition to ensuring qualification of a target substance according to your request, we will also propose an efficient separation method that may result in a cost reduction.



### Applicable scale

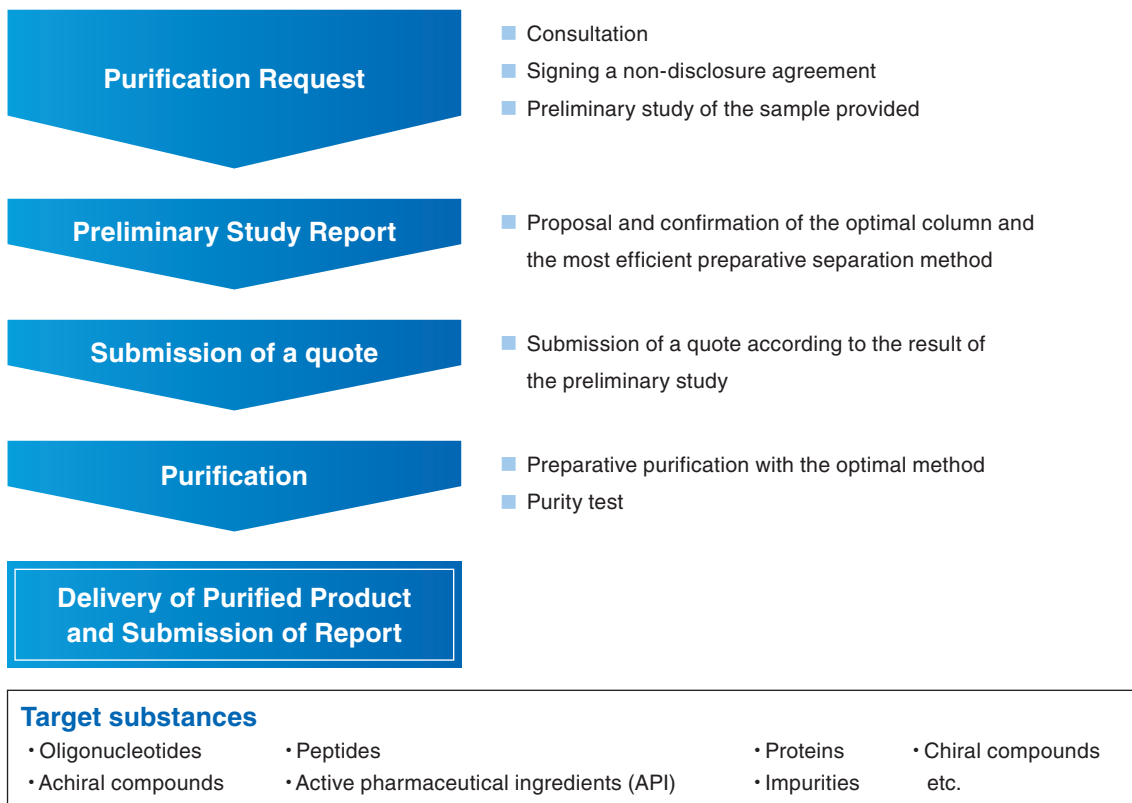
GMP: grams to tons      non-GMP: milligrams to tons

- Seamless scale up according to the development stage.
- Easy transfer of the purification method and system to the customer's facility.



## Flow of purification service

We respond flexibly to your need including confidentiality, GMP requirements, and budget. Please feel free to ask for consultation about purification of any scale from small production to mass production.



## Facilities and quality assurance system



API Purification Plant

Our GMP compliant API Purification Plant is equipped with large scale preparative HPLC systems and dynamic axial compression columns as well as a lyophilizer and various analytical instruments. Low-cost purification can be achieved by utilizing in-house products such as preparative chromatography systems, packing materials, and columns along with our experience and know-how in chromatography purification. We also established GMP quality management system for appropriate manufacturing control and quality control. Our quality assurance and quality control units are independent from our manufacturing control units, ensuring product quality and maintaining the quality system.



SMB preparative system



Dynamic axial compression HPLC column



Preparative HPLC system